The West Coast National Freight Gateway (WCNFG)

A Trade Congestion Reduction Program

"Solve the crisis by seizing the opportunity"

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The recommendations in this report have not yet been endorsed by the principal stakeholders of the West Coast National Freight Gateway (WCNFG).

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The looming capacity crisis is urgent.

The volume of trade flowing through the Ports of Los Angeles and Long Beach has surged in recent years, with the number of containers (measured in twenty-foot equivalent units or TEU) rising from roughly 5 million in 1995 to nearly 13 million in 2004. The trade volume is expected to at least triple over the next thirty years, but only if we have adequate trade infrastructure capacity. We have a problem, however. Southern California is rapidly running out of trade infrastructure capacity. Goods movement delay reached a crisis in 2004, with more than 120 ships carrying perhaps half a million TEU diverted elsewhere to unload. Our rail yards are nearing capacity and freight railways will see significant goods movement delay within five years. Highway congestion, already legendary, will only worsen. The situation in Southern California is dire: the diversion of container ships away from the Ports of Los Angeles and Long Beach during 2004 to avoid the backlog at the ports marked the beginning of potential job losses for Southern California.

The consequences will be widespread.

The consequences of a capacity crunch will not be confined to Southern California; indeed, our state government, our trade partners overseas, consumers and firms throughout the United States, and the U.S. Treasury will all feel the pinch as well. In Southern California, the capacity shortfall will exacerbate trade-related congestion and pollution. Local commerce, which shares much of the infrastructure used by international trade, will be adversely affected too. If trade-related jobs growth is restricted by capacity constraints, it will hurt our Southern California economy. Our state government will miss out on additional tax revenue. Even comparatively small delays to goods moving through Southern California will cost trade partners in countries such as China, Japan, Korea, and Taiwan hundreds of millions, perhaps billions of dollars per year, which will no doubt make imported goods more expensive for consumers throughout the United States. Firms throughout the United States will be hurt by congestion in Southern California's trade infrastructure, which connects them with markets overseas. The same troubled infrastructure connects domestic producers to consumers in Southern California, who are also an important market for United States companies.

Doing nothing is NOT a solution.

If nothing is done, increasing congestion will inevitably choke off the growth in international trade in Southern California. While superficially appealing – trade growth has not been without its costs, notably worsening traffic congestion and air pollution – doing nothing would only exacerbate existing problems. Rather than being capped at current levels, congestion and pollution would steadily worsen as the infrastructure is stretched to take every last ounce of trade. And the region would forego the potential creation of 500,000 direct and indirect trade-related jobs.

Southern California is a powerful magnet for trade.

Trade growth will stretch the limits of capacity because the fundamental economic forces of demand and capacity are inexorably drawing trade to Southern California. The demand is created by the purchasing patterns of the people who live here. Los Angeles, Orange, Riverside, San Bernardino, and Ventura Counties are home to 17 million people, more than the entire state of Florida, the nation's fourth most populous state. With San Diego County included, the regional population exceeds 20 million people, larger even than New York, the nation's third most populous state. This vast, comparatively affluent, and rapidly growing market makes the diversion of trade away from Southern California an unworkable long-term solution for shippers. Certainly some cargo can be routed elsewhere, but the flood of goods ultimately destined for the Southern California market will be shipped here one way or another. Diverting ships to Seattle, for example, would just shift some of the additional truck traffic (and the attendant congestion and pollution) from the I-710 to the entire length of the I-5.

Southern California is the logical place for trade growth.

Trade is also drawn by the scale of Southern California's infrastructure which, while clearly under strain, dwarfs the rest of the West Coast. Together, the Ports of Los Angeles and Long Beach are the third busiest container facility in the world, handling more than one third of all U.S. container traffic, and more three quarters of all container traffic on the West Coast. In a mutually reinforcing relationship, the volume of trade both supports and is supported by a network of logistic firms, freight forwarders, truckers, distribution centers, and other trade workers. Further, only Southern California has both the dockside and landside potential to accommodate the shipping industry's on-going shift to ever-larger container ships.

Trade growth is so large that Southern California MUST add capacity.

Today, roughly forty percent of the goods entering the U.S. via the Ports of Los Angeles and Long Beach are destined for the local market. A further 10 to 15 percent makes its first stop in the region, as part of some value-adding activity, before moving on. The rest moves more or less directly to destinations elsewhere in the United States. With trade expected to triple in the coming decades, Southern California would find itself out of capacity even if the ports were restricted to just handling California-bound goods. Some of the non-California trade will go to other West Coast ports and elsewhere in the U.S., but demand will outstrip current capacity outside Southern California. The other West Coast ports are simply not big enough to handle more than a fraction of the current container traffic at the Ports of Los Angeles and Long Beach, ignoring future growth. The Port of Oakland, for example is the next largest port on the West Coast. In 2003, however, the growth alone the Ports of Los Angeles and Long Beach was more than 80% of Oakland's total annual throughput! With container traffic growing rapidly everywhere on the West Coast, there is little excess capacity available to accommodate large-scale diversion from the

Ports of Los Angeles and Long Beach. Indeed, *all* of the West Coast ports will have to increase capacity to handle expected growth *even after allowing for an expected tripling in container traffic at the Ports of Los Angeles and Long Beach.* For more on the prospects for diversion, see Appendix F.

Building infrastructure is an investment in livability and prosperity.

Investing in trade infrastructure makes sense on two fronts: First, the deleterious impacts on the local community – congestion and air pollution – must be solved, or the rewards of trade will be bitter fruit indeed. Second, building trade infrastructure is an investment in the future prosperity of the region and the state. Southern California's trade infrastructure sustains hundreds of thousands of direct trade jobs. This group includes workers from all or part of numerous industries: rail transportation, water transportation, truck transportation, transportation support activities (such as freight forwarding and logistics), warehousing and storage, and wholesale trade. In 2003, there were approximately 250,000 direct workers in these industries in Los Angeles, Orange, Riverside, San Bernardino and Ventura Counties. The direct trade workers sustain additional indirect workers when they spend their salaries. Region-wide, the spending of direct trade workers sustains a further 300,000 indirect jobs, for a total of approximately 550,000 jobs dependent on the region's port, rail, intermodal, and highway trade infrastructure.

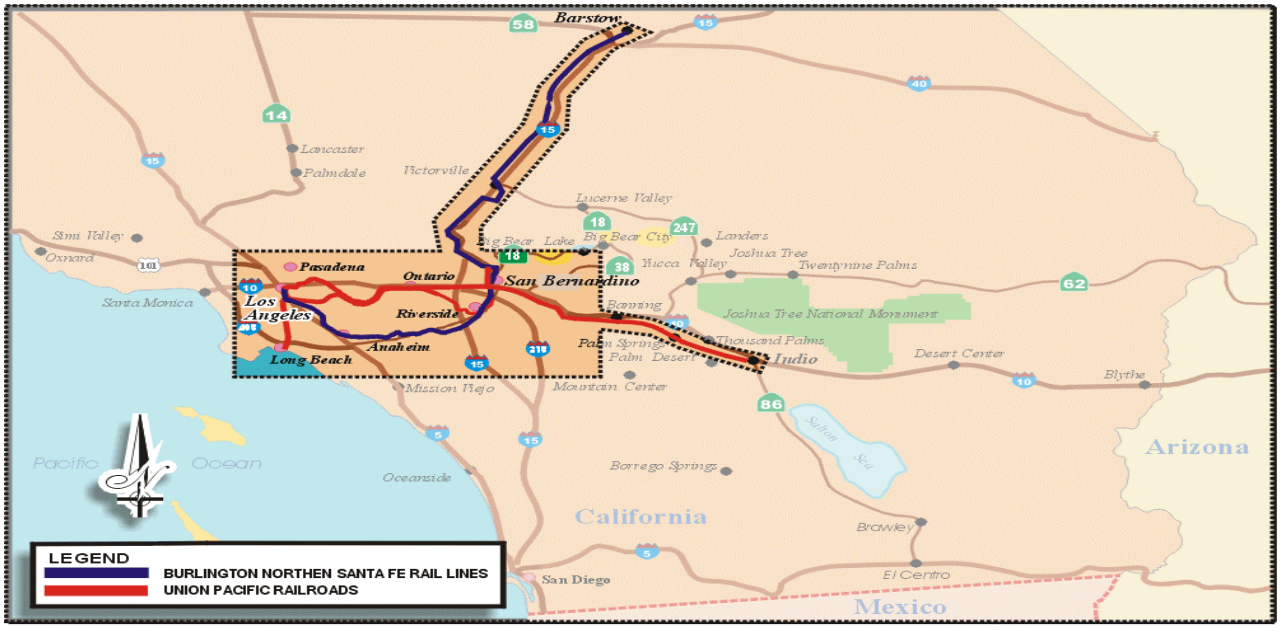
Solve the crisis by seizing the opportunity.

Southern California has been adding trade jobs at about the same rate as growth in the value of international trade moving through the L.A. Customs District. Going forward, this relationship suggests that a doubling in trade value would roughly double the number of direct trade jobs; if trade triples, so would the number of direct trade jobs. Burgeoning trade with Asia, particularly China, could easily result in a tripling in the value of trade moving through the Ports of Long Beach and Los Angeles by 2035. Yet, the capacity of existing trade infrastructure is limited. At best, the region's current ports, freeways, railroads, and intermodal rail yards could only be stretched to allow current trade volumes to double. Doubling throughput without major infrastructure improvements *might* be physically possible, but only at a severe cost in worsening congestion and pollution, which would be poorly received by everyone in Southern California and might result in a backlash against further expansion of trade. Building sufficient transportation infrastructure capacity to accommodate expected growth in international trade, therefore, represents a key opportunity. If trade-related employment triples rather than doubles, the region will have over 500,000 new jobs—employment equivalent to the entire current trade-based workforce!

2.0 The Solution: The West Coast National Freight Gateway Program

Trade flows through the Ports of Los Angeles and Long Beach over an infrastructure network that includes the ports and the region's freeways and railways all the way to the state border, as depicted in the map below. We call this network the "West Coast National Freight Gateway" or "WCNFG." This enormous transportation infrastructure network is a key component in the local, state, and national economy, connecting businesses and consumers throughout the country with our trading partners in the Pacific Rim. The volume of trade moving through the WCNFG has increased dramatically in the past decade, and the frenetic growth is expected to continue.

The West Coast National Freight Gateway Area



California has benefited enormously from the international trade flowing through the WCNFG area, but the job creation and efficient flow of goods has come at the cost of worsening congestion and air pollution. Burgeoning trade dangles the promise of continued job creation and prosperity, while simultaneously threatening to test the limits of infrastructure capacity and community patience.

Major capacity and quality of life improvements are desperately needed, yet the only way to successfully ease freight bottlenecks and reduce pollution is through a comprehensive, system-wide approach to trade infrastructure. Southern California's goods movement infrastructure is an interconnected network, with changes in one component creating far-reaching implications for the rest of the system. Despite this obvious interconnectedness, trade infrastructure is controlled by state, local, and federal governments and their agencies, plus special districts and private companies, all working independently. To avert the looming goods movement crisis, however, the disparate groups collectively responsible for the regional trade infrastructure will have to band together and tackle the problem.

As a first step, the transportation commissions of Los Angeles, Orange, Riverside, San Bernardino and Ventura counties, plus the Union Pacific and Burlington Northern Santa Fe railroads have come together to jointly investigate ways to foster a public-private partnership for goods movement in Southern California. The efforts of the 5-County Joint Venture Working Group are summarized in this report, which:

- Defines the problem (section 1.0 of this report);
- Defines the solution (the WCNFG program described here in section 2.0);
- Describes the stakes (the statewide jobs and tax revenues at risk in section 3.0);
- Identifies consensus projects (listed in section 4.0);
- Develops a funding strategy (options described in section 5.0); and
- Engages the media (section 6.0).

The WCNFG program is the regional economic development engine that can create a unified force for improvement (similar to a business improvement district or an international trade zone or an enterprise zone) to apply public and private financing to assist participating communities and businesses to improve the Southern California goods movement system.

Uniting to support the WCNFG program has three advantages. First, the WCNFG can serve as the focus for a unified process – for everything from finance to the environment – by including all of the projects that we need in a single "tent." Second, the WCNFG will make project financing more palatable (and hence possible) by coordinating public and private sector investments in the WCNFG program. Third, the WCNFG will unite us in tackling environmental issues.

3.0 What's at Stake: Employment and Tax Revenue

The West Coast National Freight Gateway (WCNFG) program will invest $10.5 billion in rail, highway and intermodal capacity improvements in Southern California. As one of the nation's premier global gateways, Southern California connects the region, the state, and the rest of the country with the dynamic economies of Asia. The volume of trade flowing through our ports has surged in recent years and is expected to at least triple over the next twenty years, but only if we have adequate trade infrastructure capacity. We have a problem, however. Southern California is rapidly running out of trade infrastructure capacity. Intermodal rail yards are nearing capacity; and freight railways will see significant goods movement delay within five years. Highway congestion, already legendary, will only worsen. This is the solution: the WCNFG program will deliver the needed capacity improvements.

The WCNFG has been designed with the mutually reinforcing goals of efficient goods movement and livable communities. Freight shares the region's rails and roads with people, so reducing freight congestion can help prevent or ease gridlock for commuters and other people, too. In addition, reducing congestion lowers the emissions produced by both passenger and goods movement vehicles. These clear benefits are easily understood. Less well recognized, however, are the fiscal benefits that would accrue to the State of California as a result of investing in the WCNFG program. Building the infrastructure improvements will create jobs and tax revenue; so will the greater trade flows made possible as the various projects in the program come on line.

The economic impact of WCNFG construction will be large.

The $10.5 billion construction program will directly and indirectly support the equivalent of almost 208,000 full-time, year-long jobs for direct and indirect workers.[1] The direct workers hold the construction-related jobs (including everyone from engineers and surveyors to concrete truck drivers and welders) hired to build the infrastructure projects. The indirect workers are those people in jobs sustained by the purchases of the "direct" construction firms and the direct workers when they spend their salaries. The direct and indirect employment effects will be spread over a construction period that is assumed to last eleven years, 2005-2015.

The 208,000 direct and indirect workers will earn about $8.3 billion during the construction period. They will pay state income taxes of $348 million. The state share of the sales tax owed on their taxable purchases will be $125 million. And the construction contractors and subcontractors will make taxable purchases worth another $197 million in tax revenues for the state. The WCNFG program, therefore, will generate for the state *at least* $669 million in state income and sales taxes on economic activity related to construction alone. Additional state taxes, such as those levied on corporate profits earned on economic activity related to the construction period will further increase state revenues.

The table on the next page illustrates the likely annual fiscal and employment impact of WCNFG construction. The figures assume that 5 percent of total program spending occurs in the first year

[1] One job may represent twelve months of work for one person, six months of work for two people, four months of work for three people, or one month of work for twelve people. Similarly, one person who worked for four years on WCNFG projects would be counted as four "jobs".

(2005); 10 percent in 2006; 15 percent per year in 2007-2010; 10 percent in 2011; 5 percent per year in 2012-2013; and 2.5 percent per year in 2014-2015.

Fiscal and Employment Impact of WCNFG Construction (Millions of Dollars and Number of Jobs)				
Year	Spending	Employment	CA Income Taxes	Sales Taxes (State Share)
2005	$525	10,000	$17	$16
2006	$1,050	21,000	$35	$32
2007	$1,575	31,000	$52	$48
2008	$1,575	31,000	$52	$48
2009	$1,575	31,000	$52	$48
2010	$1,575	31,000	$52	$48
2011	$1,050	21,000	$35	$32
2012	$525	10,000	$17	$16
2013	$525	10,000	$17	$16
2014	$263	5,000	$9	$8
2015	$263	5,000	$9	$8
Total*	**$10,500**	**208,000**	**$348**	**$322**

*May not sum due to rounding.

For simplicity, all dollars are reported on a current year basis (using 2003 wage levels), not year-of-expenditure or year-of-receipt, an approach which omits the effect of inflation. The exact annual flow of state revenue will depend on the share of total construction underway each year. A shorter construction period would increase the annual return and a longer one would decrease it, but in both cases the total revenue accruing to the state would remain about the same.

Many trade-dependent jobs are at risk.

International trade sustains hundreds of thousands of jobs in Southern California. The number of trade-related jobs has been growing along with the increase in trade volumes. Yet, with the regional infrastructure nearing capacity, continued growth in these jobs – which frequently pay well – is threatened. Here we estimate the potential number of additional jobs at risk and the state tax revenues foregone if Southern California's trade infrastructure capacity is not increased to accommodate the projected demand.

What's at stake?

Southern California has been adding trade jobs at about the same rate as growth in the value of international trade moving through the L.A. Customs District. In the past 25 years, the inflation-adjusted value of international trade has increased 3.6 times, while the number of direct trade jobs has grown 2.6 times. Looking just at the 14 years since 1990, trade value has increased 1.56 times and trade-related jobs have increased 1.55 times. Going forward, this relationship suggests that a doubling in trade value would roughly double the number of direct trade jobs; if trade triples, so would the number of direct trade jobs.

Burgeoning trade with Asia, particularly China, could easily result in a tripling in the value of trade moving through the Ports of Long Beach and Los Angeles by 2035. Yet, the capacity of

existing trade infrastructure will not support that much additional traffic. At best, the region's current ports, freeways, railroads, and intermodal rail yards could only be stretched to allow current trade volumes to double. Thus, unless something is done, current capacity constraints will restrict trade-related employment to at most doubling rather than tripling.

Failure to build the transportation infrastructure to accommodate expected growth in international trade, therefore, would be a tragic and a monumental missed opportunity. **If trade-related employment doubles when it could have tripled, the region will have foregone job creation equivalent to the entire trade-dependent workforce in 2003.** The jobs at stake are described in the next section.

Trade-related employment of 550,000 is at risk.

The infrastructure targeted for improvement under the WCNFG program sustains hundreds of thousands of direct trade jobs. This group includes workers from all or part of numerous industries: rail transportation, water transportation, truck transportation, transportation support activities (such as freight forwarding and logistics), warehousing and storage, and wholesale trade. In 2003, there were approximately 250,000 direct workers in these industries in Los Angeles, Orange, Riverside, San Bernardino and Ventura Counties.

The direct trade workers sustain additional indirect workers when they spend their salaries. The LAEDC used direct effects multipliers from the Regional Input-Output Modeling System (RIMS II) developed by the U.S. Department of Commerce, Bureau of Economic Analysis, to estimate the additional jobs supported by the 250,000 direct trade workers. Region-wide, these direct trade jobs sustain a further 300,000 indirect jobs, for a total of roughly 550,000 jobs dependent on the region's port, rail, intermodal, and highway trade infrastructure. These 550,000 workers generate state income and sales taxes of $1.27 billion per year. Thus, if Southern California's trade-related job growth is limited to doubling instead of tripling by capacity constraints, the state will have missed out on the creation of more than half a million jobs and $1.27 billion in annual state revenue.

Trade-related state tax revenue of $17 billion is at risk.

In one scenario, Southern California does nothing to improve trade infrastructure capacity. The region will begin to feel the pinch when unused capacity on the rail lines begins to disappear sometime between 2008 and 2010. Congestion on the region's freeway system will worsen due to regional population and trips growth, even without any increase in freight volumes; growing international trade will further exacerbate the problem. Trade-related jobs will continue to be added as firms throughout the goods movement industry adjust their operations to handle the growing volume of trade using existing infrastructure. Trade and trade-related jobs will double (at most) in this scenario, leveling off sometime after 2010 as capacity constraints and increased congestion inevitably choke off growth.

Alternatively, Southern California could invest in greater infrastructure capacity. In addition to easing congestion for non-trade-related transportation and reducing air pollution, adding new capacity could allow the region to triple rather than just double its trade-related job base. The extra job growth would begin almost immediately as trade-related firms take actions to handle the larger volumes that can be accommodated under this scenario. Employment builds gradually with increases in the value of international trade moving through Southern California. In this scenario, the region would double its trade-related jobs sooner than in the no-build alternative, and then continue to add jobs instead of stalling out.

The difference between the two scenarios represents the opportunity for the region and the state. It also represents what may be lost if nothing is done. The table below shows the total number of potential new trade-related jobs (direct and indirect) plus the related state income and sales taxes at risk if additional trade capacity is not added. For each year beginning in 2008, the table shows the cumulative jobs at risk as well as the taxes those jobs would have generated that year. The cumulative total builds in a smooth progression until it is equal to the difference between the two scenarios: a doubling versus a tripling of trade-related employment. The actual year-to-year variation in jobs at risk likely would be more uneven than presented here. Note that the impacts are based on current dollars, and have not been adjusted for inflation.

Fiscal and Employment Costs of Capacity Constraints on International Trade Growth in Southern California				
	Cumulative	Annual Revenue Forgone (millions)		
Year	Net Jobs Forgone	CA Income Taxes	Sales Taxes (State Share)	Total*
2008	16,000	$27	$10	$37
2009	32,000	$55	$20	$75
2010	49,000	$83	$30	$113
2011	65,000	$112	$40	$152
2012	82,000	$141	$50	$191
2013	99,000	$170	$61	$231
2014	117,000	$200	$72	$271
2015	134,000	$230	$82	$312
2016	152,000	$260	$93	$354
2017	171,000	$292	$105	$396
2018	189,000	$323	$116	$439
2019	208,000	$355	$127	$482
2020	227,000	$388	$139	$527
2021	246,000	$421	$151	$571

Fiscal and Employment Costs of Capacity Constraints on International Trade Growth in Southern California (continued)				
	Cumulative	Annual Revenue Forgone (millions)		
Year	Net Jobs Forgone	CA Income Taxes	Sales Taxes (State Share)	Total*
2022	266,000	$454	$163	$617
2023	285,000	$488	$175	$663
2024	305,000	$522	$187	$710
2028	389,000	$665	$239	$903
2029	411,000	$702	$252	$954
2030	433,000	$740	$265	$1,005
2031	455,000	$778	$279	$1,056
2032	477,000	$816	$293	$1,110
2033	500,000	$855	$307	$1,160
2034	524,000	$895	$321	$1,220
2035	547,000	$936	$336	$1,270
Total	**547,000**	**$12,683**	**$4,549**	**$17,230**

*May not sum due to rounding.

Over the next thirty years, Southern California could miss out on the opportunity to create 547,000 more trade-dependent jobs (including direct and indirect employment). The impact would build gradually. By 2035, workers in the missed jobs would have paid $936 million (in today's dollars) in state income taxes annually. Their taxable spending would have generated sales taxes, the state share of which would have been $336 million per year. Thus, by 2035 the state will be foregoing at least $1.27 billion per year. The cumulative impact on the state's revenues over three decades is enormous: $12.7 billion in lost state income taxes and $4.5 billion of sales taxes for the state. The total sales tax revenues missed would be higher still, since hundreds of millions in sales taxes that are returned to local jurisdictions is not included here.

Actual WCNFG results could be even better (or even worse if we do nothing).

The contribution from trade-dependent job growth seems enormous, yet if anything, this is probably an underestimate. At all stages, our assumptions used to determine the potential jobs growth – those at risk without additional capacity – have been conservative. We have assumed for example that trade through the Southern California ports has the potential to triple over the next 30 years, suggesting a compound annual growth rate of 3.2 percent. Overall, the U.S. potential economic growth rate is similar, based on population growth and expected improvements in labor productivity. California is growing faster than the U.S. as a whole, however, and international trade is growing faster than the domestic economy. Since 1980, the value of trade moving through the L.A. Customs District has grown at an average compound annual growth rate of 5.3 percent. Since 1990, trade value has averaged 3.5 percent growth per year.

China has greatly increased its manufacturing capacity and is continuing to do so; China has joined the WTO; and apparel tariffs and quotas have been removed, which will likely shift still more

production to China. These and other trade trends all point to an acceleration of trade growth in the coming years, well above our conservative assumption. Thus, we have almost certainly underestimated the risk of doing nothing.

We've probably also understated the problems related to doing nothing. We've assumed that current infrastructure could be stretched to allow for a doubling in trade value (and jobs) without substantial investment in new capacity. In practice, however, capacity constraints and community complaints about the impacts of unmitigated growth would almost certainly cut off the jobs growth at much lower levels. Residents of nearby communities complain today about the volume of truck traffic on the I-710; imagine how they would feel if congestion on the freeway between 8AM and 5PM continued unabated around the clock. If anything, there are more jobs – and greater tax revenue for the state – at risk than our estimate suggests.

This estimate of what's at stake is also low because it focuses on international trade, which ignores the related risks to the domestic side of the economy. Capacity on the freeways and rail system is not, of course, just dedicated to international trade. Domestic cargo moves to and from Southern California on the same rail system and uses the same intermodal rail yards as international cargo. And international cargo competes for space on the freeways with local, regional, and national goods *and* all of the people moving around the region. If the burgeoning level of international trade further restricts mobility in already severely congested Southern California and chokes off potential domestic activity, the number of jobs – and state revenue – at risk would be far larger.
The projection of threatened jobs is not just a hypothetical exercise. International trade will continue to grow in California and the United States and the jobs will be created. The only question is where. In the long-term, trade can, and will, be diverted. The diversion of container ships away from the Ports of Los Angeles and Long Beach during 2004 to avoid the backlog at the ports marked the beginning of potential job losses for Southern California.

The threat for Southern California, and thus the state, is threefold.

First, jobs that could have been created in California will go elsewhere on the West Coast (Mexico, Portland, Tacoma, Seattle, and Vancouver, Canada), elsewhere in the U.S. (Gulf ports such as Houston and even ports on the East Coast.), or will simply not be created at all. [Diversion is really only possible at the margins: the Los Angeles and Long Beach ports dwarf the rest of the West Coast ports.

Second, trade diverted from Southern California will shift congestion rather than reduce it. Southern California has 17 million people (20 million if San Diego is included) and our population is growing rapidly. Many goods are shipped here because the biggest market is here. If goods are shipped through other West Coast ports (or Houston for that matter), they will still have to be transported by truck or rail to Southern California. The congestion and pollution will simply be shifted from Southern California exclusively to the I-5 and other major corridors through the rest of the state.

Third and most important, Southern California is the logical place to improve infrastructure capacity. Only Southern California can handle the largest new ships; the region's trade capacity – while strained – is orders of magnitude larger than the alternatives. *Just the annual increase* in container traffic at the Ports of Los Angeles and Long Beach in 2003 was equivalent to more than 80 percent of the entire annual container traffic handled by the Port of Oakland. Going forward,

Southern California will see an increase in international trade related goods movement even if all of the other ports on the West Coast double their capacity. Fortunately for the state, building capacity improvements in Southern California will hasten the job creation, and increase the long-term cumulative benefit to the state, including congestion relief and reduced air pollution.

Conclusion: In total, the WCNFG could generate 750,000 jobs and $18 billion in state taxes over the next 30 years.

The $10.5 billion WCNFG investment program in infrastructure capacity for goods movement will generate major economic, environmental and congestion relief benefits for Southern California. The program is anticipated to create 208,000 construction–related (direct and indirect) jobs, resulting in at least $669 million of net new state income and sales tax revenues. Permanent trade-related direct employment is projected to grow by 250,000 workers more than under the baseline case, with an additional 300,000 indirect jobs being created. Together, these new positions are forecast to ultimately generate $1.27 billion *annually* in new state income and sales tax revenues. Over 30 years (2005-2035), the combined net new state revenues from both construction and trade-related jobs are conservatively estimated to exceed $17.9 billion. The following table summarizes these combined effects.

Fiscal and Employment Costs of Capacity Constraints on International Trade Growth in Southern California (Number of Jobs and Millions of Dollars)					
Year	Potential Construction-Related Jobs	Forgone Trade-Related Jobs	Forgone CA Income Taxes	Forgone Sales Taxes (State Share)	Forgone CA Tax Total*
2005	10,000		$17	$16	$33
2006	21,000		$35	$32	$67
2007	31,000		$52	$48	$100
2008	31,000	16,000	$79	$58	$137
2009	31,000	32,000	$107	$68	$175
2010	31,000	49,000	$135	$78	$213
2011	21,000	65,000	$146	$72	$219
2012	10,000	82,000	$158	$66	$224
2013	10,000	99,000	$187	$77	$264
2014	5,000	117,000	$208	$80	$288
2015	5,000	134,000	$238	$90	$329
2016		152,000	$260	$93	$354
2017		171,000	$292	$105	$396
2018		189,000	$323	$116	$439
2019		208,000	$355	$127	$482
2020		227,000	$388	$139	$527
2021		246,000	$421	$151	$571
2022		266,000	$454	$163	$617
2023		285,000	$488	$175	$663
2024		305,000	$522	$187	$710
2025		326,000	$557	$200	$757
2026		347,000	$593	$213	$805
2027		368,000	$629	$225	$854
2028		389,000	$665	$239	$904
2029		411,000	$702	$252	$954
2030		433,000	$740	$265	$1,005
2031		455,000	$778	$279	$1,057
2032		477,000	$816	$293	$1,109
2033		500,000	$855	$307	$1,162
2034		524,000	$895	$321	$1,216
2035		547,000	$936	$336	$1,271
Total*	**208,000**	**547,000**	**$13,031**	**$4,870**	**$17,901**

*May not sum due to rounding.

4.0 Consensus Project List

Project Selection for the West Coast National Freight Gateway

The 5-County Joint Venture study team started with the SCAG consensus goods movement project list. From the SCAG list, the team identified projects that could be completed or well underway within the next 10 years. Private-sector projects—like the public-sector ones—were included if they offered substantial mobility and environmental benefits. For each project, the team estimated how much funding will be requested from federal and non-federal sources during the 6-year federal reauthorization period for each project, and the extent of the funding gap (if any) that will need to be closed in the four years after the federal reauthorization ends. The WCNFG consensus list is presented on the next page.

Setting project priorities, identifying funding sponsors, and expanding the investment partners are all issues that must be addressed in the next phase of the delivery process.

Project Delivery Next Steps

The 5-County Transportation Commissions and the two freight railroads expect to develop an agreement or MOU for at least one project from the consensus list that:

- Requires both public and private partners to seek funding to complete;
- Can be completed in twelve to eighteen months;
- Includes clear environmental and economic benefits;
- Can be used to educate the region on the importance of goods movement and the benefits of public-private partnerships.

5-County Consensus Project List

Project	County	Federal Request Over federal TEA 3 Period	Non-Federal Share over federal TEA 3 Period	Funding Needed in Post federal TEA 3 Years	Total Project Cost Over 10 Years
RAIL PROJECTS					
Rail Grade Separations*	LA, OC	$149	$71	$0	$220
Port Rail Intermodal Access	VEN	$14	$3	$0	$17
Rail Capacity Improvements	LA, RIV, SB, OC, VEN	$300	$300	$660	$1,260
Alameda Corridor East	LA, RIV, SB, OC, VEN	-	-	-	$2,500
Colton Rail Grade Separation	SB	$35	$40	$0	$75
HIGHWAY PROJECTS					
SR-78/Brawley Bypass	IMP	$14	$4	$0	$18
State Rt 57 Truck Climbing Lane	OC	$58	$8	$0	$66
State Rt 91 Truck Storage Lane	OC	$6	$2	$0	$8
Interstate 15 Truckway**	SB	$50	$1,585	$0	$1,635
I-710 Truckway	LA	$300	$300	$3,400	$4,000
I-710/Gerald Desmond Bridge	LA	$200	$200	$250	$650
Total		**$1,126**	**$2,513**	**$4,310**	**$10,449**

* These grade separations do not duplicate those included in the 4-County ACE request of $900 million in TEA 3.
** Means federal request is for preliminary design and engineering.

5.0 Conceptual Funding Framework

We propose that the WCNFG program participants finance $10.5 billion in projects to expand rail, highway and intermodal goods movement capacity in Southern California. The broad scope of the projects in the WCNFG program and the widespread benefits at the local, state and national level justify approximately equal *economic* contributions from federal, state and local sources ($3.5 billion each, in today's dollars). Expenditures to expand the goods movement capacity of the region will provide significant and long lasting benefits including relief of traffic congestion, increase in public safety and improved environmental quality.

This funding framework is based on a simple, three-pronged approach

- First, we propose that $5 billion in revenue bonds be issued for the program. The state would be responsible for the interest payments on the bonds (in the form of tax credits over a 25 year period), and local private sector participants would be responsible for the repayment of principal (in the form of container fees and toll charges over a 25 year period). The state's Infrastructure and Economic Development Bank would issue the revenue bonds on behalf of the WCNFG program and oversee the financing. In real (present value) terms, the state's interest payments (tax credits) would total about $3.5 billion, and the local / private principal repayments would total about $1.5 billion.

- Second, we propose that the federal government participate through the allocation to the WCNFG program of $3.5 billion in federal funds, potentially in the form of customs revenues from WCNFG cargo ports. In 2003 alone, the Los Angeles U.S. Customs District collected $6.6 billion in customs duties on goods imported through the ports of Long Beach and Los Angeles. Approximately 10 percent of this annual revenue stream would be designated for goods movement investments in Southern California over the next six years.

- Third, we propose that local governments and private beneficiaries of the WCNFG program contribute about $2.0 billion of additional resources to help fund the capital costs.

State and Local Partnership – A Unique Bond Financing Approach

The ongoing state budget crisis has resulted in a shortage of state funding for transportation projects. Gas tax proceeds and other funds that might have been used for state and local transportation projects have been diverted to the state general fund, which leaves little in the way of pay-as-you-go funding from the state for transportation projects.

In addition, the state may be reaching its capacity for issuing large amounts of debt financing. The state currently has over $35 billion in unsold voter-approved bonds, and debt service obligations are expected to approach or exceed 7 percent of general fund revenues in the next few years (a level that many analysts consider high for a state).

These facts suggest the need for a creative approach to bond financing for the WCNFG projects that relieves the state of the full burden of paying debt service. Accordingly, we propose a financing approach that divides the responsibilities for payment of interest and principal. This approach avoids burdening the state with more traditional debt by limiting the state's obligation to

interest-only payments (in the form of tax credits), with repayment of the principal portion of the bonds to be made with container fees and toll charges collected from the private sector users of the ports and freight movement corridors.

Proposed State Contribution – Interest Paid in Tax Credits Instead of Cash

Tax credit bonds are debt obligations whereby the government (in this case the state) pays the interest on bonds by providing investors with an annual credit against tax liability instead of cash interest payments.

The state's interest-only funding contribution would be made in this manner. First, $5 billion in 25 year revenue bonds would be sold for the WCNFG program. Bond principal would be paid from container fees and toll charges paid by private sector railroads and other beneficiaries of the WCNFG program. Instead of annual cash interest payments on the bonds (e.g., 5 percent per year), the state would give bondholders an annual credit for 25 years against state income tax liability (e.g., 5 percent of the amount of bonds held by the taxpayer). The economic cost to the state would be the same—giving up tax revenue has the same bottom line effect as paying interest. However, this approach has a key advantage for the state, because the bonds would not be treated as state debt, preserving the state's bonding capacity for other needs.

The WCNFG program is a highly profitable investment for the State. A study prepared by the Los Angeles County Economic Development Corporation reports that the WCNFG program will produce cumulative state income and sales tax revenues estimated at $17.2 billion by 2035, far in excess of the proposed state share of the cost of the WCNFG program.

Federal tax credit bonds have been marketed successfully to investors for several years, and more are planned. We are confident that this approach will work for California, too. California has an enormous pool of corporate and personal income taxpayers who are potential investors in the WCNFG program bonds. Such a program is "tax-bracket-neutral" and thus fair to all because a dollar of tax credit has the same value to an investor no matter what his or her tax bracket is.

The proposed tax credit legislation and a detailed discussion of the proposed state tax credit contribution to the WCNFG program are included in Appendix A to this report.

The Local Component – Principal Repayment with Container Fees and Toll Charges

We propose that part of the local share of WCNFG program costs consist of principal payments on the revenue bonds issued for the WCNFG program.

In our proposed financing plan, the goods movement industry is the source of local funds. We also propose that the participants in the goods movement industry be consulted about the fairest and best way to accomplish this. See Appendix B for further information about local voluntary fees and toll charges that are mode and market neutral.

One attractive possibility would be fees and toll charges paid by users of WCNFG port and freight movement corridors. A fee could be charged on each container that originates or terminates at the port facilities and is moved by rail or road into or out of Southern California (i.e., the counties of Kern, San Bernardino, San Luis Obispo, Santa Barbara, Ventura, Los Angeles, Orange, Riverside,

San Diego and Imperial). The fee could be paid by retailers and passed on to customers. Another possibility would be to charge truck tolls on WCNFG-financed truck roadways.

The use of voluntary fees and toll charges to back project debt is not new. The Alameda Corridor Project between the ports and the central rail yards near downtown Los Angeles was funded in large measure by debt backed by voluntary user fees and container charges agreed to some years back and paid by the participating retailers, manufacturers, and wholesalers. For example, a $100 fee per container for a voluntary fee would be substantially lower than the $665 average cost charged per imported container for customs fees.

Federal Government Component – Allocation of U.S. Customs Revenues

We propose that the federal contribution to the WCNFG program be a one-third share ($3.5 billion) matching the state one-third share (tax credits) and the local / private sector one-third share (combination of bond principal payments and other funding contributions) described above. It seems to us that the most obvious and logical source of federal funds for this purpose is a goods-related source—customs duties.

In 2003 alone, United States customs duties totaled $19.8 billion, $6.6 billion of which was collected on goods imported through the ports of Long Beach and Los Angeles. Very little of these revenues have been earmarked for any specific purpose; most flow into the general fund of the U.S. Treasury to cover other (unrelated) federal expenses. It seems logical and appropriate that a portion be devoted to improvement of the facilities that are integral to the generation of those revenues. Designating just 10 percent of this annual revenue stream over the next six years for freight-related investments in Southern California would be sufficient to fully fund the federal share.

Customs duties are paid by manufacturers, retailers, and wholesalers and can be passed on to customers. Customs duties apply only to imported goods coming into the United States. No customs duties are levied on exports.

The proposed federal contribution could be accomplished by amending Section 58c of Title 19 of the United States Code to create within the general fund of the United States Treasury a separate account for allocations for the WCNFG program. Customs duties would be deposited in this new account in agreed-upon amounts to fund the federal contribution to the program. This is not a new approach. A similar mechanism is in place to fund certain functions of the Department of Homeland Security.

6.0 Media Survey and Initial Outreach

The goal of our media survey was to learn how much the media knows about goods movement and its component parts and to discover where the media turns for goods movement information. The results should be used in creating an outreach program that will allow public agencies and the private sector to collaborate in getting out their goods movement-related messages to the public, media, and industry analysts. [See Appendix E for the media survey questionnaire, a complete list of outlets surveyed, and a summary table of survey results.]

Next Steps for Media Outreach

Better treatment of goods movement in the media must start with a better communications with and understanding of media representations. The survey found that members of the local media believe that they "get it" when it comes to understanding goods movement and its relevance for their respective audiences. This is good news in as much as the media believes that goods movement is important and worth covering; it is less heartening in that it is more difficult to influence how an issue is framed when members of the target audience think they already understanding the "big picture" of an issue. Fortunately, the members of the media indicated they are open to learning more about goods movement, and were overwhelmingly receptive to the idea of an informational tour.

The 5-County Joint Venture participants expect to bring their communications and media relations staffs together to develop a joint education and media outreach agreement. For topics and projects where there is general agreement, the participants need to develop core messages. The messages will be considerably more powerful (and persuasive) if the goods movement community is seen to be speaking in unison.

Appendix A
Conceptual Funding Framework
Using a Unique Bond Finance Program

I. Introduction

The West Coast National Freight Gateway (WCNFG) program is designed to invest $10.5 billion in rail, highway and intermodal capacity improvements in Southern California. By delivering the needed capacity improvements, the WCNFG program will relieve the congestion of trade-related growth while capturing enormous benefits through hundreds of thousands of jobs and associated economic growth and tax revenue. The cost of the WCNFG program will likely be split between the federal, state, and local governments plus the private sector, all of whom stand to benefit from the infrastructure improvements.

This section outlines financing approaches that might contribute all or a portion of the state, federal, and private sector investment in the program. The financing approaches were developed in consultation with each member of the 5-County Joint Venture study team. The discussions covered capital investment needs; a survey of financial planning factors and potential sources of investment capital; a comprehensive survey of financing tools from tax incentives to grants and the feasibility of each; a matrix for assessing suitability of the financing tools; potential revenue streams that can be leveraged to attract investment; and a set of the institutional considerations.

The basic recommended funding framework for the WCNFG program is based on a three-pronged approach.

First, we propose that $5 billion in a new type of revenue bond be issued for the program. The state would be responsible for the *interest payments* on the bonds (in the form of tax credits over a 25 year period), and local private sector participants would be responsible for the *repayment of principal* (in the form of container fees and toll charges over a 25 year period). The state's Infrastructure and Economic Development Bank would issue the revenue bonds on behalf of the WCNFG program and oversee the financing. In real (present value) terms, the state's financial contribution in making the interest payments (tax credits) would equal about $3.5 billion, and the financial contribution of the local / private principal repayments would equal about $1.5 billion.

Second, we propose that the federal government participate through the allocation to the WCNFG program of $3.5 billion in federal funds, potentially in the form of Customs revenues from WCNFG cargo ports. In 2003 alone, the Los Angeles U.S. Customs District collected $6.6 billion in customs duties on goods imported through the ports of Long Beach and Los Angeles. By allocating just 10 percent of this revenue stream over the next six years to freight infrastructure in Southern California, the federal share could be fully funded. For a more detailed discussion of this proposal to use dedicated federal U.S. Customs revenues see Appendix C.

Third, we propose that local governments and private beneficiaries of the WCNFG program contribute about $2.0 billion of additional resources to help fund the capital costs. This amount, together with the $1.5 billion contribution toward the principal retirement of the tax credit bonds, would fully satisfy the local/private share.

II. State and Local Partnership – A Unique Approach is Needed

The ongoing state budget crisis has resulted in a shortage of state funding for transportation projects. Gas tax proceeds and other funds that might have been used for state and local transportation projects have been diverted to the state general fund, which leaves little in the way of pay-as-you-go funding from the state for transportation projects.

In addition, the state may be reaching its capacity for issuing large amounts of general obligation debt. The state currently has over $35 billion in unsold voter-approved bonds and debt service obligations are expected to approach or exceed 7 percent of general fund revenues in the next few years (a level that many credit analysts consider high for a state).

These facts suggest the need for a creative approach to bond financing for the WCNFG projects that relieves the state of the full burden of paying debt service. Accordingly, we propose a financing approach that divides the responsibilities for payment of interest and principal. This approach avoids burdening the state with more traditional debt by limiting the state's obligation to interest-only payments (in the form of tax credits), with repayment of the principal portion of the bonds to be made with container fees and toll charges collected from the private sector users of the ports and freight movement corridors.

III. Proposed State Contribution – Tax Credit Bonds

A. Traditional State Infrastructure Financing

State support for infrastructure programs has traditionally taken one of three forms: Pay-As-You-Go Grants (in which the state funds capital grants from current revenues); General Obligation Borrowing (in which the state issues general obligation bonds to fund capital grants); and Credit Enhancement (in which the state or a state agency guarantees the local project debt). Each of these typical approaches has its drawbacks.

Pay-as-you-go grants would require annual general fund spending commitments if they were used to support these major freight projects. This clearly is not realistic given the magnitude of the projects and the state's continuing fiscal crisis. Further, as past experience with Prop 42 funds has demonstrated, annual state spending commitments are subject to diversion when budgetary pressures arise.

Funding the grants through the issuance of state general obligation (GO) bonds is problematic because of the continuing pressure on the state's credit ratings. California's debt ratings have only recently started recovering from the budget crisis. Nonetheless, Standard & Poor's and Moody's still give California ratings that are among the lowest for all states. In addition, voter approval would be required to incur GO indebtedness.

Credit enhancement is of only marginal benefit to the local project sponsor borrowers due to California's relatively low rating level. And many of the projects need a much deeper public subsidy to be feasible than is afforded by a slight reduction in interest cost resulting from credit enhancement.

B. State Subsidy through Tax Credits

One concept gaining increasing currency at the federal level—tax credit bonds—may be applicable within the state. Tax credit bonds are debt obligations issued by or on behalf of a project sponsor, where the government (in this case the state) picks up the interest cost portion of debt service by providing investors with an annual credit against tax liability, in lieu of cash interest payments from the borrower. Eliminating interest expense can cut the project sponsor's borrowing costs by half—or more.

The state subsidy using tax credits is not a "free lunch." The foregone revenues ("tax expenditures") on an annual basis would be similar to the cost of debt service on conventional financing, such as GO borrowing. Supporting infrastructure projects through tax subsidies, however, has several advantages over the more conventional approaches described above.

A tax credit bond program:

- Avoids the need for additional state spending and the associated potential of annual diversion by the legislature of funds earmarked for transportation infrastructure to other purposes;
- Cushions the rating impact on the state relative to other approaches such as direct GO borrowing, since the state does not incur additional debt; and
- Provides a much more effective subsidy than a state guarantee while substantially reducing the risk to an investor of payment default, since the tax credit is a non-cash return.

C. Potential Template: The Existing QZAB Program

Congress enacted the first federal tax credit bond program—Qualified Zone Academy Bonds (QZABs)—in 1998. The QZAB legislation authorizes local education agencies to issue $400 million per year of tax credit bonds for improvements to public schools serving lower-income neighborhoods. A number of California school districts, including Los Angeles, Pomona Valley, and San Jose, have issued QZABs in recent years.

The QZAB program has been extended by Congress several times—most recently in September, 2004 for another two years, so that the total authorized nationwide volume to date is $3.2 billion. The issuance volume is allocated state-by-state on a statutory formula basis, and each state designates which of its school districts are to issue the bonds.

Under the QZAB program, school districts can issue bonds with a final maturity of up to 15 years, and use the proceeds to fund capital improvements. Each district is responsible for repaying the principal from local resources. The U.S. Treasury grants the investor an annual tax credit against federal income tax liability, in lieu of the investor receiving cash payments of interest from the issuer. The tax credit rate is based on similar term mid-investment grade corporate bond yields. A schematic diagram of a tax credit bond is shown on the next page.

From the QZAB issuer's perspective, having another entity such as the U.S. Treasury effectively pay the interest component of debt service through a tax credit makes the bonds interest-free. For a 15-year bond, this represents a subsidy of approximately 50% of the cost of borrowing in present value terms. The longer the term of the bonds, the deeper will be the subsidy; a 25-year bond in today's yield environment confers an approximately 70% subsidy.

D. State Version of the QZABs

A number of proposals were introduced in the 108th Congress to apply the federal QZAB program to surface transportation projects. Several bills representing over $125 billion of tax credit bonds were filed, with bipartisan sponsorship.[1] It is possible that some federal tax credit measure may be included in the successor bill to TEA-21 to be enacted in 2005, but its prospects are uncertain at this time. In any case, it is highly unlikely that any federal program would be large enough to meet more than a fraction of the state's investment needs. Accordingly, there will be a need for the state to provide some form of assistance to advance these important goods movement projects.

[1] Some of the bills introduced include H.R. 2571 (the Rail Infrastructure Development and Expansion Act), S. 1505 (the American Rail Equity Act), S. 1109 (Build America Bonds Act), and H.R. 2615 (the Rebuild America Act).

The same concept of tax credit bonds could be adapted today at the state level, using *state* rather than federal tax credits. Presently, California collects about $40 billion a year in personal income tax, and approximately $6.5 billion per year in bank and corporation taxes. The bonds would be most marketable if the tax credits were broadly applicable to state corporate or personal income taxes. These state income taxpayers represent an enormous pool of potential investors who might wish to purchase a tax-advantaged instrument that would reduce their state tax liability.

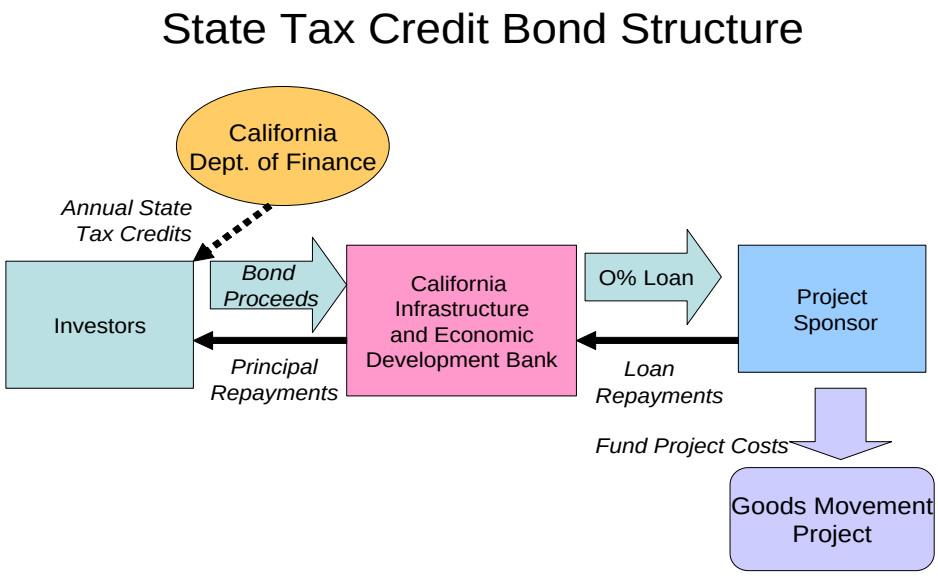
Two appealing features of a tax credit, as opposed to a tax deduction, are its efficiency and its equity.

- **Efficiency**: Each dollar of tax credit granted translates to a dollar saved by the issuer, making it a highly efficient form of public subsidy. Further, unlike a grant-based program, where the state as grant-maker must monitor construction reimbursement requests and ensure compliance with various spending requirements, a tax incentive program does not entail a significant administrative burden.

- **Equity**: Unlike a tax deduction, a tax credit program is "bracket-neutral," meaning it should have the same economic value for all taxpayers with state tax liability. Even though the state income tax rate (maximum of 9.3% for individuals and 3.5% for corporations) is substantially lower than the highest marginal federal tax rates, a dollar of tax credit has the same value to an investor regardless of marginal tax bracket, as long as the credit itself is non-taxable.

E. Program Structure – A Partnership between the State and Local Government

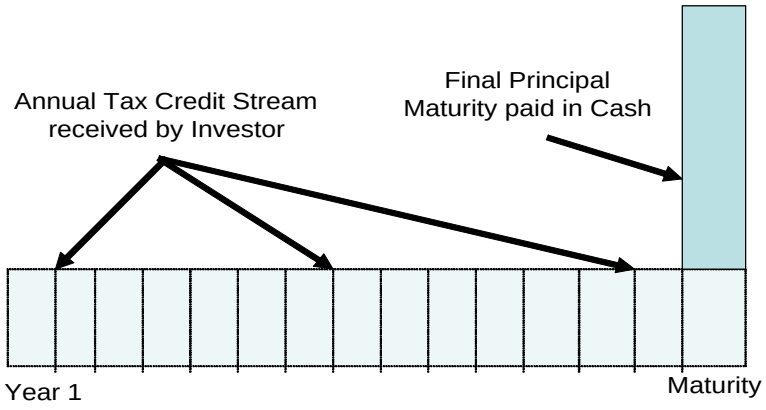
Under this concept, state legislation would establish a new form of bond, a California Tax Credit Bond ("TCB"). A TCB would involve a state agency such as the California Infrastructure and Economic Development Bank issuing long-term bonds. The proceeds would be lent to a project sponsor, which could be a county transportation authority, a



newly-formed joint powers authority or a private sector transportation provider such as a railroad. The TCB principal would be repayable from the project sponsor's loan repayments using locally-identified resources (tolls, sales taxes, freight facility charges, etc.). In lieu of cash interest, the investor would receive an annual voucher—a state tax credit—that could be applied against the investor's California income tax liability.

So, for example, if the required rate of return for 25-year bonds were 5%, the State could grant each investor in a $1,000 TCB an annual $50 California tax credit applicable to state income taxes in like amount each year until maturity. It is assumed that the TCB would be structured as a term bond with a single 25-year maturity. At the end of year 25, the issuer would repay the investor $1,000 in cash using user charges or other available revenues that had been accumulating in a sinking fund (either through an upfront deposit or annuity-type yearly contributions). The economic return to the investor should be a 5% yield-to-maturity, assuming the investor has sufficient state tax liability to offset. Significantly, the tax credit component—unlike a cash interest payment—is devoid of

Investment Flows Associated with a Tax Credit Bond



any risk of issuer default. Effectively, it allows the investor to "internally credit enhance" the interest component of debt service. The diagram above shows the investment flows associated with a tax credit bond from an investor's perspective.

F. Debt Service Comparison: Tax Credit Bonds vs. Tax-Exempt Bonds

From the project sponsor's perspective, an interest-free long-term debt instrument is tantamount to a 72% grant. The table below compares the annual debt service cost to an issuer of a $100 million balloon maturity TCB to a conventional tax-exempt bond issue. Assuming 25-year obligations in this example, the TCB approach results in a 72% financial subsidy (present-value benefit) to the issuer / project sponsor relative to a conventional financing approach.

Instrument	
Tax Credit Bonds *	$ 2.0 million /year
Conventional Tax-Exempt Bonds **	$ 7.1 million /year
Annual Savings	$ 5.1 million /year
Total Savings of Tax Credit Bonds over 25 years	$ 127.5 million (nominal)
Present Value Savings (discounted at 5%)	$ 71.9 million (72% of par)

Assumptions:

* Tax Credit Bonds issued as balloon maturity 25-year obligations with level annual contributions to an internal sinking fund invested at 5%.

** Tax-exempt Bonds issued as 25-year level debt service obligations at 5%.

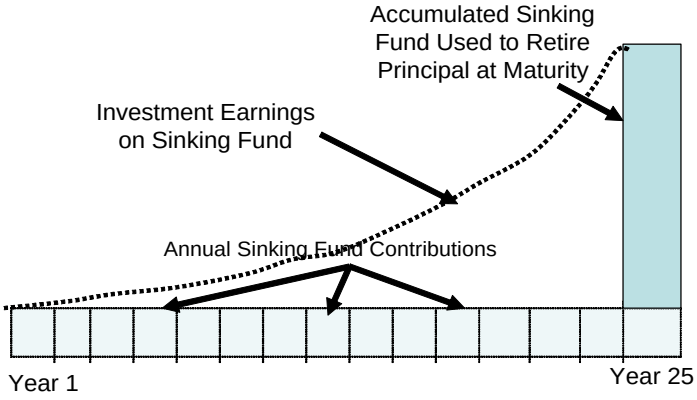
To address the question of an investor lacking sufficient state tax liability, the enabling legislation could allow for carry-forwards of unused tax credits from one year to the next. Alternatively, the investor could sell the bond to another investor, much in the same manner as there is an active secondary market in municipal bonds.

IV. Principal Repayment – The Local Contribution

As discussed above, the repayment of the principal portion of the TCB would be the responsibility of the local program sponsor, perhaps a new joint powers transportation authority consisting of local and regional transportation stakeholders. The source of repayment would be locally-identified resources (tolls, sales taxes, freight facility charges, etc.) collected and remitted to the program sponsor. For a more detailed discussion of these local resources, see Appendix B.

For any given term of TCB, the value of the tax incentive would be greatest if the bond had a balloon maturity as opposed to being amortized (level debt service) each year. In addition, a single maturity should be more readily marketable than smaller serial maturities. Presumably, investors would want the issuer to establish an internal sinking fund to provide for the orderly retirement of the balloon at final maturity. It is assumed that annual sinking fund contributions would be invested in low-risk instruments such as U.S. Treasury or Agency securities or high-grade guaranteed investment contracts. If the sinking fund is a trustee account, the interest earnings on it should not be federally taxable. The investment growth of the sinking fund over time is illustrated below:

Sinking Fund Earnings to Retire a Tax Credit Bond



V. Fiscal Implications

A. Cost to the State

Under a state tax credit bond program, California would incur an annual "tax expenditure." It would forego the receipt of state taxes receivable in a dollar amount equal to the yearly tax credits granted (assuming all credits were claimed).

State tax incentives are not a new concept for encouraging investment in targeted sectors. Over the last decade, California has enacted several dozen state tax code provisions—exclusions, deductions and tax credits—resulting in "tax expenditures" by the state. Collectively, these incentives are providing annual tax relief totaling $19.2 billion for individuals and $4.3 billion for corporations.[2] Among the tax credits enacted in recent years are programs for corporate research and development, solar energy and Enterprise Zones.

In the context of the WCNFG infrastructure program, it is assumed that the state's share (in present value terms) would be about **one-third** of the $10.5 billion total capital investment, or approximately $3.5 billion. Federal, local and private funding sources would cover the balance of needs. On an annualized basis, this level of state support would roughly equate to a $250 million per year tax credit stream—enough over 25 years to support a $5 billion TCB program with the bonds being issued over a several year period. And unlike other state tax incentives, the fiscal impact can be accurately gauged through regulating the TCB issuance schedule.

This same level of fiscal commitment—$250 million per year for 25 years—alternatively could be used to support principal and interest payments on approximately $3.5 billion of tax-exempt State GO Bonds. Not only is this amount $1.5 billion less than the TCB proceeds supportable by $250 million per year, but debt issuance in this magnitude would further glut the market with California GO paper at a time when the state may need to do substantial additional borrowing.[3] Issuing $3.5 billion of additional GO Bonds would also adversely affect certain financial ratios used in GO credit analysis, such as debt outstanding per capita, and would have a greater impact on operating ratios than the TCB program.

B. Benefits Outweigh State Costs

In order to accurately assess the fiscal impact of a state tax credit bond program (or any other form of state contribution to the WCNFG program, for that matter), it is necessary to look not only at the "cost" side of the equation (the tax expenditures) but also the "revenue" side (new receipts generated). A TCB program oriented to major goods

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[2] *Tax Expenditure Report 2003-2004*, California Department of Finance.

[3] The $250 million / year fiscal commitment supports about $1.5 billion less in conventional tax-exempt G.O. bonds than in tax credit bonds because with the former it must cover both cash interest and principal payments, instead of just tax credits with the latter.

movement projects will have both short-term and long-term benefits in the form of additional state tax receipts generated.

In the near term, the WCNFG program will result in an increase in local construction employment. A $10.5 billion goods movement infrastructure program is projected to directly and indirectly support the equivalent of almost 208,000 full-time, year-long jobs. These workers will earn about $8.3 billion during the construction period. The resulting state income tax as well as sales tax on the purchase of local goods and services is estimated to total at least $669 million.

In terms of permanent direct and indirect trade-related employment, a $10.5 billion capital program is anticipated to stimulate an additional 550,000 jobs by 2035, compared to a "do nothing" investment scenario. These added jobs will produce a net increase of $37 million in annual State income and sales tax revenues beginning in 2008, growing to $1.27 billion by 2035. The cumulative fiscal benefit to the State (excluding federal and local benefits) in terms of additional income and sales tax revenues is estimated to total at least $17.2 billion by 2035.

These revenue benefits, therefore, should be compared to the state's assumed tax expenditure of up to $250 million per year during the 25-year term of the tax credit bonds:

Fiscal Cost: ($250 million/year x 25 years) =	$ 6.25 billion
Fiscal Benefit:	
From Construction Period Employment:	$ 0.67 billion
From Trade-Related Permanent Jobs:	$ 17.23 billion
Total Additional Revenues to State:	$ 17.90 billion
Benefit/Cost Ratio = 2.9**:** 1	

Note: All above amounts are in nominal dollars

VI. Market Expansion – TCBs Do Not Compete With Existing State Bonds

State tax credit bonds would be a new form of financial instrument that should not compete for investors with the state's own needs to issue substantial volumes of conventional general obligation bonds. As noted above, tax credit bonds should appeal to investors in all tax brackets, so long as they have state tax liability equal to the amount of the annual credit they receive. In addition, tax credit bonds should appeal to non-financial corporate investors, a market segment that is not a significant purchaser of conventional GO bonds.

It is possible that other classes of institutional investors who are not presently investing in state infrastructure, such as public, union and corporate pension funds, could also find holding these bonds attractive. This especially could be the case for goods movement projects for railroad capacity improvements that are not eligible for federal tax-free

financing. In such cases, the TCBs for these projects may offer a competitive taxable yield. It may be possible to de-couple the principal from the tax credits, and offer components of the TCBs to different classes of taxable and tax-exempt investors.

VII. Centralized Issuer

As has been demonstrated with the existing QZAB program, new financial products sometimes face challenges in gaining widespread investor acceptance, due to lack of familiarity, limited liquidity, and credit or tax risk concerns. Pooling local transportation projects into a larger composite offering could help reduce transaction costs, encourage efficient pricing, and facilitate liquidity for the bonds in the secondary market. In addition, a centralized issuer could help pre-package standardized documentation and market the program to transportation project sponsors around the state. Finally, pooling a diversified portfolio of underlying project financings should assist those projects that are weaker credits in gaining market access—particularly where the sinking fund deposits are made annually, rather than up front. All of these factors favor the use of a statewide entity such as the California Infrastructure and Economic Development Bank.

It is expected that a large, geographically diverse pool of projects from around California would warrant an investment-grade rating. It should be cost-effective to arrange credit enhancement through commercial bond insurers. It may also be useful to explore with CALPERS or CALSTRS their providing credit enhancement on the principal portion of the bonds for a fee; the guarantees of both entities are rated "AAA" by Standard & Poor's. As noted above, the "interest" portion (the tax credit) is risk-less in terms of default exposure.

VIII. Tax Credit Bond Summary

California tax credit bonds may offer a new tool to policymakers to help stimulate investment in goods movement projects, at a time when the state's resources are severely limited. TCBs offer the following advantages:

- Avoid the need for additional state spending and the associated potential of annual diversion by the legislature of funds earmarked for transportation infrastructure to other purposes;
- Cushion the rating impact on the state relative to other approaches such as direct GO borrowing, since the state does not incur additional debt;
- Utilize market discipline to help allocate resources to worthy investments, since only those infrastructure projects that can repay principal will be eligible to benefit from tax credit bonds;

- Dramatically reduce the cost of capital for goods movement projects, potentially by more than 70% in present value terms, by enabling zero-percent borrowing;

- Reduce the default risk to investors of holding the bond, as the tax credit is a risk-free non-cash return;

- Draw upon new classes of investors, such as corporations and possibly pension funds, who presently are not active investors in California infrastructure;

- Allow the state to cap the volume of annual tax expenditures through regulating issuance volume, unlike other state tax expenditure programs that are less predictable; and

- Require minimal state staffing overhead to administer the program.

IX. Project Allocations And Alternative Sources of Financing

The goods movement rail and highway projects in the 5-county area represent about $10.5 billion in improvements over the next 10 years. Goods movement rail projects are about $4 billion of that total. We anticipate the federal government, state government, and local governments in conjunction with private businesses each contributing approximately **one-third** of the project funding for the $10.5 billion goods movement capital program.

A. Federal Funds -- Goods Movement Funding for Rail

Last year, the Southern California Congressional delegation submitted a letter to the House Transportation and Infrastructure Committee requesting $900 million in funding for the Alameda Corridor East (5-county expanded definition) from the proposed Projects of National and Regional Significance grant program. This request —while substantial— represents just 25% of the total rail project needs over the next 10 years for goods movement in the 5-county area. Highway-related freight projects exceed $6 billion more in capital costs.

Once this proposal becomes a plan with support from affected parties, additional federal funding will be sought to fund the WCNFG program, to get the total federal contribution up to $2.5 - $3.0 billion in later years.

One potentially important federal financing option was recently introduced in the 109th Congress by Sen. Jim Talent (R-MO) and Sen. Ron Wyden (D-OR): the Build America Bonds Act, intended as an amendment to the TEA-21 reauthorization bill.

Build America Bonds would provide $30 billion in new transportation infrastructure funding and, as a one-time bonding program, would enable state and local governments to complete large new projects of significance. The legislation would create a federally chartered non-profit corporation that would issue up to $39 billion in federal tax credit bonds, with $30 billion to be used to fund transportation projects. The remaining $9 billion would be invested for the life of the bonds (30 years), in order to generate the funds necessary to repay the entire $39 billion principal amount at maturity. These funds would be in addition to the regular federal formula funds to be made available by the reauthorization of TEA-21 and would allow cash-strapped states to improve their transportation infrastructure without a tax increase.

Additionally, Congressman Sam Graves (R-MO) is working on a draft bill that expands tax credit financing tools to fund transportation infrastructure projects and this legislation when it is released, should be reviewed and considered.

Finally, as discussed above, billions of dollars of U.S. Customs duties are collected annually on goods moved through the ports of Long Beach and Los Angeles. Dedicating a small portion—just 10 percent--of these revenues in support of goods movement expansion in the region could fully satisfy the one-third federal contribution to freight infrastructure in Southern California. For a more detailed discussion see Appendix C.

B. State Tax Credits -- Goods Movement Funding for Rail

Given current federal, state and local fiscal constraints and the limited financial capacity of the major railroads, only a small portion of the capital-intensive WCNFG projects has identified funding sources. In light of the state's current financial condition, the concept of leveraging existing and potential revenue sources through tax credit bonds, as discussed above, may be the best approach.

The financing of some transportation projects with bonds backed by Indian gaming revenues appears uncertain at this time, and Proposition 42 funds are still at risk of diversion in the upcoming state budget process. The situation is very complicated, but goods movement is said to be one of Governor Schwarzenegger's top priorities, because of its economic, environmental and mobility benefits.

More traditional sources like the State Infrastructure Bank and state GARVEE bonds, if available, can also be utilized as supplemental funding sources.

C. Local Contributions -- Goods Movement Rail Funding

The local allocation is a difficult one because goods movement is not institutionalized like people movement (transit and highway projects). The Los Angeles County Metropolitan Transportation Authority has already allocated funds to pay 17% of the project costs for the Alameda Corridor East Construction Authority within Los Angeles

County. The local share to be put forward by the other four counties for goods movement rail projects is under study.

D. Private Sector/Retailers -- Goods Movement Rail Funding

A market neutral container, gate, or regulatory fee could fund the private sector allocation. Ideally, such a fee should be "market and mode neutral," and agreed to by the retailers, wholesalers and manufacturing interests. In essence, it could be a freight version of the highly successful passenger facility charge that is added onto airline tickets by many U.S. airports to fund their infrastructure needs. (See Appendix B for a more complete discussion.)

X. Next Steps for Funding

Based on the findings from its research, the LAEDC consulting team recommends that the Joint Venture participants seek to reach consensus on pursuing the following actions:

- The establishment of state tax credit bond legislation for the state share of costs of goods movement projects;
- The establishment of federal tax credit bond legislation in tandem with the designation of a portion of Customs revenues generated within the Los Angeles Customs District to fund the federal share of goods movement projects;
- A strategy that develops a freight facility fee, applied to all commodities and all modes of freight transportation in California, as the local/private share; and
- The development of a framework for managing the freight facility fees that ensures they are used exclusively for investment in goods movement.

APPENDIX B
THE LOCAL COMPONENT:
BOND PRINCIPAL REPAYMENT WITH CONTAINER FEES AND/OR TOLL CHARGES

We propose that the local share of WCNFG program costs be funded by the goods movement industry, whose members should be consulted regarding the fairest and best way to implement container fees and toll charges, and ensure that funding is invested only on agreed-upon goods movement projects. Our concept involves interested parties negotiating a fee structure, which would be implemented by contract (and perhaps by statute). As explained in the text and Appendix A, the revenues generated by the fees and toll charges will be used to retire the principal of the revenue bonds issued to finance approved projects of the WCNFG program.

One possibility would be to establish fees and toll charges on users of WCNFG port and freight movement corridors. A fee could be charged on each container that originates or terminates at the port facilities and is moved by rail or road into or out of Southern California (i.e. the counties of Imperial, Kern, Los Angeles, Orange, San Bernardino, San Diego, San Luis Obispo, Santa Barbara, Riverside, and Ventura). The fee could be paid by retailers and passed on to customers as an explicit surcharge, like the airport-imposed Passenger Facility Charges added to airline tickets. In any case, the bonds that would be secured by these revenue streams would not appear as liabilities of the carriers or shippers collecting the fees or charges.

A. Alameda Corridor Example

One example of such a voluntary user-designed structure is the user fee and container charge structure being administered by the Alameda Corridor Transportation Authority for the Alameda Corridor Project revenue bonds. These bonds were issued to finance the Alameda Corridor Project between the ports and the central rail yards near downtown Los Angeles and are backed in large part by fees and container charges paid by the participating railroads.

- A voluntary user fee is charged on each waterborne container that originates or terminates at the Port facilities of Los Angeles or Long Beach and is moved by rail into or out of Southern California by rail, regardless of whether the containers have traveled on the Alameda Corridor Project rail corridor. A non-waterborne container is also charged a fee.

- The fees apply for 35 years and are being used to pay debt service on approximately $1.8 billion of revenue bonds.

- The fees vary depending on the size of the container, whether it is waterborne (or not) and whether it is loaded (or not). The fees effective on April

1, 2002 ranged from $4 for 22-foot long empty waterborne containers up to $40 for loaded waterborne containers longer than 52 feet.

- The user fees are increased every year on January 1, based on changes in the CPI during the previous twelve months. The increases are restricted to not less than 1.5% nor greater than 3% per year, regardless of the actual change in the CPI.

B. Impact upon Goods Movement Customers

How much would a container fee at the two WCNFG ports cost the major retailers, wholesalers, and manufacturers who are import customers of the goods movement industry? The table on the next page assumes a hypothetical charge of $100 per container for every container imported into the United States, *whether or not the container travels through Long Beach or Los Angeles*. The annual cost shown is much higher than it would be if we limited our analysis to containers traveling through Long Beach and Los Angeles, but it illustrates the minimal impact on the top 25 importers.

The Annual Cost of a $100 Per Container Nationwide, Voluntary, Market-Neutral Fee				
Importer/ Headquarters		TEUs in 2003	Annual Cost (Millions)	Annual Revenue (Billions)
1	Wal-Mart Stores Inc. *Bentonville, AR*	471,600	$47.2	$256.0
2	The Home Depot Inc. *Atlanta, GA*	267,100	26.7	64.8
3	Target Corporation *Minneapolis, MN*	208,400	20.8	48.2
4	Dole Food Company *Westlake Village, CA*	171,300	17.1	5.3
5	Chiquita Brands International Inc. *Cincinnati, OH*	108,600	10.9	2.6
6	Lowe's Cos. *Mooresville, NC*	96,500	9.7	30.8
7	Kmart Corporation (Sears) *Troy, MI*	86,400	8.6	55.0
8	Heineken USA Inc. *White Plains, NY*	77,700	7.8	13.6
9	Interbrew SA *Norwalk, CT*	65,400	6.5	8.8
10	Ikea International A/S *Plymouth Meeting, PA*	60,200	6.0	15.4
11	Payless ShoeSource Inc. *Topeka, KS*	56,800	5.7	2.8
12	Ashley Furniture Industries *Arcadia, WI*	53,400	5.3	1.7
13	Matsushita Electric Corp. of America *Secaucus, NJ*	52,800	5.3	7.9
14	Sony Corp. of America *New York, NY*	50,700	5.1	25.5
15	American Honda Motor Co. *Torrance, CA*	50,400	5.0	78.0
16	General Electric Company *Fairfield, CT*	49,300	4.9	151.0
17	Toyota Motor Sales USA Inc. *Torrance, CA*	49,050	4.9	163.6
18	Pier 1 Imports Inc. *Fort Worth, TX*	47,300	4.7	1.9
19	Big Lots Inc. *Columbus, OH*	46,000	4.6	4.4
20	LG Group *Englewood Cliffs, NJ*	44,700	4.5	.324
21	Nike Inc. *Beaverton, OR*	41,800	4.2	12.3
22	Mattel Inc. *El Segundo, CA*	41,000	4.1	5.1
23	Toys "R" Us Inc. *Wayne, NJ*	40,900	4.1	11.6
24	Samsung Electronics America Inc. *Ridgefield Park, NJ*	40,800	4.1	54.2
25	Bridgestone Americas Holding Inc. *Nashville, TN*	40,000	4.0	9.0

Source: *Journal of Commerce*; LAEDC.

C. Conclusions

It appears that funding some of the WCNFG program costs with voluntary fees or toll charges paid by users of WCNFG port and freight movement corridors and passing the cost along to customers is administratively-feasible, and should have minimal impact on the retail price of imported goods and merchandise. By way of comparison, Customs duties represent about six times the cost of the $100 per container fee shown in the example shown above. Furthermore, the current duties appear to have had very little impact on reducing the demand for Asian products imported into California and the United States. On the other hand, failing to invest in the WCNFG will exact a major cost on businesses and consumers: to overcome port access congestion, businesses will be required to make redundant investments in infrastructure at other entry points, and the local economy may forego substantial employment growth.

APPENDIX C
PROPOSED FEDERAL CONTRIBUTION
ALLOCATION OF UNITED STATES CUSTOMS REVENUE

We propose that the federal contribution to the WCNFG program be $3.5 billion, a one-third share of the $10.5 billion in total program costs. [The economic value of the federal contribution would be matched equally by the state, which would issue tax credits to cover bond interest, and by the private sector, whose user fees would repay the bond principal (see Appendices A and B) and contribute additional funding.] Perhaps the most obvious and appropriate source of federal funds for the WCNFG program would be customs duties—a goods movement-related source.

In 2003 alone, United States Customs duties totaled $19.8 billion, $6.6 billion of which (about one-third) was collected on goods imported through the ports of Long Beach and Los Angeles. The vast majority of these revenues are transferred to the United States Treasury general fund, without being earmarked for any specific purpose. However, it seems logical that some of the duties should be devoted to improving the facilities that make their collection possible. Designating just seven percent of the collections in the Los Angeles Customs District to regional freight projects over the next six years should fully fund the one-third federal share.

Customs duties are paid by manufacturers, retailers, and wholesalers and can be passed on to customers. Customs duties apply only to imported goods coming into the United States; no customs duties are levied on exports.

The proposed federal contribution could be accomplished by amending Section 58c of Title 19 of the United States Code to create a separate account for WCNFG projects within the general fund of the United States Treasury. Customs duties would be deposited in this new account in agreed-upon amounts to fund the federal contribution to the WCNFG program. This approach is not new; a similar mechanism is used to fund certain functions of the Department of Homeland Security.

A. Background

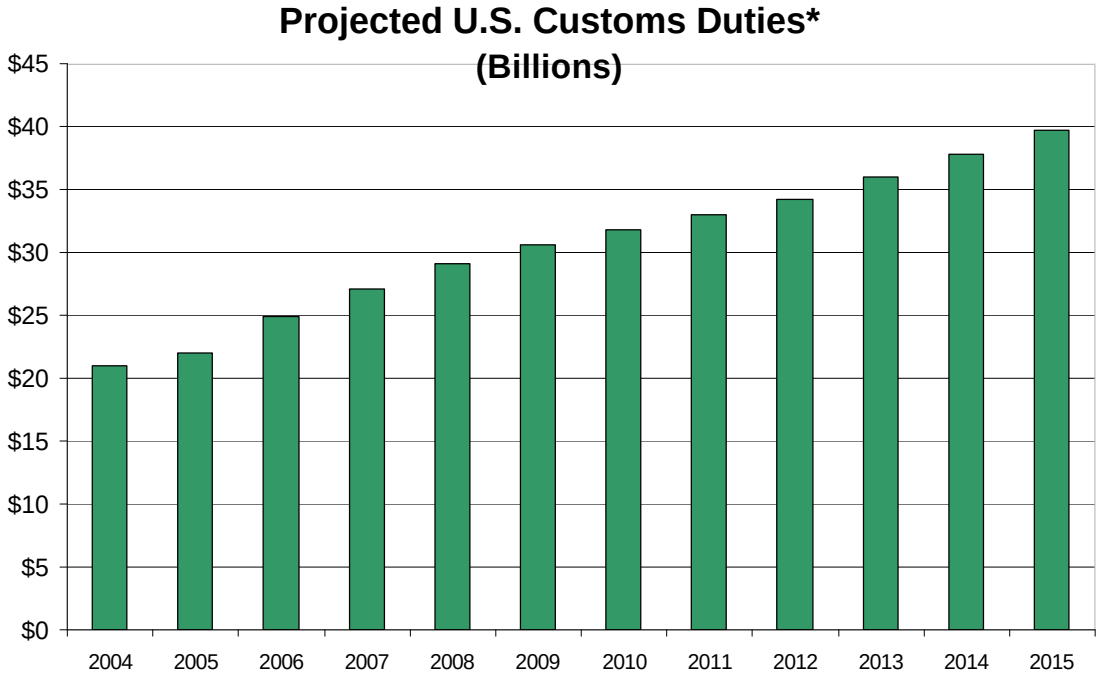
On July 31, 1789, the first Congress passed an Act establishing 59 customs districts in 11 states, and creating the U.S. Customs Service. In the ensuing 215 years, customs revenue has played an important role in our nation's growth, stability and national security. Customs duties are not imposed on exports—just on imports entering the United States.

The U.S Customs Service administers the U.S. Trade Program by enforcing the laws governing the flow of merchandise or commerce across U.S. borders, and assessing and collecting duties, excise taxes, fees, and penalties on imported and exported goods and services. It has been estimated that approximately 80 percent of customs duties are collected from marine sources[1]. The Los Angeles Customs District, which consists of 20

[1] GAO-02-1033 Marine Transportation.

airport and seaport collection points in Southern California and Nevada, accounts for approximately 45% of all customs duties collected on waterborne trade in the entire United States.

The Congressional Budget Office and the White House Office of Management and Budget expect customs duties to almost double to just under $40 billion per year by 2015. The chart below presents actual U.S. Customs Duties collected in 2004, and forecast for 2005-2015. The chart presents the average of the CBO and OMB forecasts.



*2004 actual; 2005-2015 forecast.
Source: CBO, *The Budget and Economic Outlook: Fiscal Years 2006 to 2015* and OMB, *The Budget of the U.S. Government, Fiscal Year 2006: Analytical Perspectives.*

B. Key Facts Regarding Customs Fees

- Customs duties are paid by manufacturers, retailers, and wholesalers and passed on to customers.
- Based on the continued growth of imported goods over the last decade, the amount of the duty charged on specific import products appears to have had little or no impact on consumer demand.
- National customs duties totaled $21 billion in 2004, and are estimated by the Congressional Budget Office to reach $29 billion annually by 2010.
- The Los Angeles Customs District, assuming its one-third share of the national total continues, will account for customs duties of about $50 billion over the next

six years (2005-2010). Dedicating just 7% of that revenue should fund the $3.5 billion federal share of the WCNFG program.

C. Conclusions

Funding the federal contribution to the WCNFG program from a goods-related source—customs duties—makes sense. The entire federal contribution to the WCNFG program would be less than the United States Treasury collects in customs duties *each year* from goods imported through the ports of Long Beach and Los Angeles. Moreover, the "lost" customs revenue would really represent a short-term investment that would enable further growth in freight imports. The investment would be more than offset by the additional customs duties generated by the higher volume of freight imports in future years. The nation's trade, particularly with Asia, is growing rapidly yet our current trade transportation network lacks the capacity to handle all of the potential growth. Since goods have to be imported before duties can be collected, investing in the WCNFG program will help ensure the continued growth of both trade and the attendant customs revenues.

Appendix D
Legislative Outreach

The WCNFG is a program targeted at enhancing California's freight movement capacity to meet the nation's growing market needs. The program is comprised of a balanced list of goods movement projects that add capacity on highways and railways, provide separate truck lanes, and enhance safety throughout the Southern California segments of the national transportation network.

A. Legislative Program

The objectives of the legislative program are for the 5-County Joint Venture Working Group members to:

- Organize legislative support at the State level that achieves the goals and projects of the WCNFG program;
- Assist in crafting or supporting State legislative solutions that establish public-private partnerships, create innovative tax credit bond financing structures, improve bond issuance opportunities, empower design-build strategies, and improve project delivery or fast tracking of goods movement projects;
- Work with the private sector on legislative outreach at the state and federal levels;
- Support the State of California's federal effort of the donor-donee issues and non-New Starts earmarks (i.e., Projects of National Significance) in TEA-3 legislation; and
- Avoid adversely affecting the state's pursuit of the federal return-to-source equity effort and the use of Prop. 42 funds for goods movement.

B. Proposed Legislation

The WCNFG program will eventually require the passage of a series of state and federal bills. First, we recommend introducing state-level legislation [draft language included below] that will authorize the California Infrastructure and Economic Development Bank to issue bonds to finance WCNFG projects. Each bond investor will receive annual California state tax credits in lieu of interest payments. Each bond investor will receive principal payments from project revenues from local sources (such as user fees) pledged to the investor's series of bonds.

Preliminary discussions about this concept with prospective authors have occurred and it is still possible to include the drafted language below in a bill later this session. Additionally, other state legislation should be reviewed and considered, particularly SB 760 (Lowenthal), which imposes a $30 container fee on each TEU for goods movement improvements across the state. We recommend working closely with the author to further

develop the concept even though there may be large hurdles concerning potential violations of the federal constitution and international trade act to be overcome.

On the federal front, we recommend both supporting the ACE request for $900 million in TEA 3 and augmenting funding available for the Projects of National and Regional Significance program to make room for the WCNFG project list. This should be carried all the way through the work of the conference committee, which is expected to occur in the spring of 2005. Finally, we recommend reviewing the Talent/Wyden Bond bill and the Graves tax credit bill to determine if either or both could be used to help fund the WCNFG projects along with the proposed customs revenue proposal. If so, the bills should be actively supported.

Amendments to Government Code

Add Article 9 to Chapter 2 of Division 1 of Title 6.7 of the Government Code to read as follows:

Section 63049.70. The Legislature hereby finds and declares all of the following:
(a) The West Coast National Freight Gateway Program (the "WCNFG Program") will enhance California's freight movement capacity to meet international and national growing market needs emanating from the Ports of Los Angeles and Long Beach, which combined, rank as the nation's largest and the world's third largest container port. The WCNFG Program will expedite multi-modal and intermodal freight flows, reduce congestion, improve air quality, improve safety, create jobs and enhance California's economic competitiveness.
(b) Given the state's current fiscal constraints, it is in the public interest to authorize, and to implement as soon as possible, the sale of tax credit bonds, in order to ensure that funds will be available for the purpose of funding ten high priority goods movement transportation projects within the WCNFG Program.
(c) Southern California's economy is highly dependent upon the efficient movement of goods and people throughout the Los Angeles Basin. Approximately 50% of the growth of congestion on freeways, arterials and railways is attributable to moving international goods within California and from California to the rest of the nation. The region has largely subsidized the resulting cost of increasing degradation to its transportation network and air quality. By creating the WCNFG Program the state recognizes a rebalancing of cost sharing between the state and local interests is appropriate and necessary.

Section 63049.71. For purposes of this article, the following terms have the following meanings, in addition to the definitions contained in Section 63010, unless the context clearly indicates or requires another meaning:
(a) "Tax credit bonds" means bonds (as defined in Section 63010) that do not bear interest but that entitle the beneficial owners thereof to California state tax credits as provided in Section 63049.74.
(b) "Tax credit bond record date" means the close of business on the last day of each calendar year. The first tax credit bond record date with respect to any tax credit bond will be the close of business on the last day of the calendar year in which the tax credit bond is issued and the last tax credit bond record date with respect to any tax credit bond will be the close of business on the last day of the calendar year in which the tax credit bond is redeemed or retired.
(c) "WCNFG Program Project" means each project (as defined in Section 63010) for public development facilities and economic development facilities for the movement of goods in the counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino and Ventura that is generally described as follows.

[Goods movement priority rail and highway projects in the 5-County area will be named at a later date by mutual agreement of the 5 County RTPA's, Caltrans, and the two Class I railroads.]

Section 63049.72. The bank may enter into financing agreements with participating parties for the purpose of financing or refinancing WCNFG Program Projects.
(a) The bank may issue tax credit bonds for the purpose of financing or refinancing the costs of WCNFG Program Projects. Tax credit bond proceeds may also be used to fund necessary reserves, credit enhancement costs, and costs of issuance, provided that at least 95 percent of the proceeds of tax credit bonds must be expended for financing or refinancing capital expenditures for WCNFG Program Projects.
(b) The total principal amount of tax credit bonds authorized to be issued pursuant to this article in each of the five fiscal years beginning with the 2007-08 fiscal year is one billion dollars (for a total of five billion dollars), and any portion of the authorization not used in any fiscal year may be used in any future fiscal year, provided that the bank must determine prior to the issuance of any tax credit bonds that the aggregate amount of California state tax credits granted to all taxpayers pursuant to this article for all tax credit bonds previously issued pursuant to this article and the tax credit bonds then being issued does not exceed two hundred fifty million dollars for any fiscal year.
(c) Principal of tax credit bonds shall be payable from, and secured by, revenues of one or more WCNFG Program Projects or portions thereof as and to the extent provided in the constituent instruments defining the rights of the holders of the tax credit bonds. The last date for payment of principal of any tax credit bond may not be more than 30 years after the date of issuance of the tax credit bond.
(d) The bank may also issue interest-bearing bonds (including commercial paper) pursuant to the Act for the purpose of financing or refinancing the costs of WCNFG Program Projects. Proceeds of such interest bearing bonds may also be used to fund necessary reserves, capitalized interest, credit enhancement costs, and costs of issuance, provided that at least 95 percent of the remaining proceeds of such interest bearing bonds must be expended for financing or refinancing capital expenditures for WCNFG Program Projects. The bank may use the proceeds of tax credit bonds issued pursuant to this article to pay principal of and interest on such interest bearing bonds or to refund such interest bearing bonds pursuant to Section 63081.
(e) The bank must obtain an investment grade credit rating from a nationally recognized rating service for any interest bearing bonds issued pursuant to subsection (d) and any tax credit bonds issued pursuant to this article prior to the sale of such interest bearing bonds or tax credit bonds.

Section 63049.73. Tax credit bonds shall not bear interest. The beneficial owners of tax credit bonds on tax credit bond record dates shall be entitled to annual California state tax credits in amounts determined by the bank on or prior to the date of issuance of the tax credit bonds. The amount of the tax credit in any calendar year with respect to any tax credit bond shall be an amount that is equal to the principal amount of the tax credit bond times a percentage rate set by the bank at the time of issuance of such bond, which rate will, in the judgment of the bank, having due regard for the prevailing financial market conditions for bonds that are similar as to credit and maturity as the tax credit bond, be the lowest tax credit that would enable the bank to sell such tax credit bond at a price equal to the principal amount thereof on the date of such determination. In the event that the bond is not outstanding for the entire year preceding the tax credit bond record date, the amount of the credit allocated to the beneficial owner of the bond will be pro-rated based upon the number of days the bond was outstanding.

Section 63049.74. (a) For each calendar year beginning on or after January 1, 2007, the beneficial owner of a tax credit bond shall be allowed as a credit against the amount of the beneficial owner's "net tax," as defined in Section 17039 of the Revenue and Taxation Code, and the beneficial owner's "tax," as defined in Section 23036 of the Revenue and Taxation Code, for such calendar year, an amount equal to the annual tax credit for that calendar year established by the bank pursuant to Section 63049.73 with respect to the tax credit bond.

(b) In the case where the credit allowed by this section exceeds the "net tax," as defined in Section 17039 of the Revenue and Taxation Code, or the "tax," as defined in Section 23036 of the Revenue and Taxation Code, the excess may be carried over by the beneficial owner to reduce the beneficial owner's "net tax" or the "tax," respectively, for the next 10 taxable years, or until the credit has been exhausted, whichever occurs first. The credit allowed by this section shall be nonrefundable.

(c) The bank or the trustee for the tax credit bonds shall do all of the following:

(1) Certify the amount of each annual tax credit as specified in subdivision (a).

(2) Issue documentation evidencing the tax credit to the registered owners of the tax credit bonds on each tax credit bond record date and obtain from those registered owners and provide an annual listing to the Franchise Tax Board (preferably in electronic form, and in a manner agreed upon by the Franchise Tax Board) of the beneficial owners of the tax credit bonds on the tax credit bond record date, the taxpayer identification number of each such beneficial owner, and the amount of tax credit to which each beneficial owner is entitled.

(3) Arrange for the registered owner of each tax credit bond to provide the beneficial owner or owners of that tax credit bond with a copy of the information reported to the Franchise Tax Board for such beneficial owner or owners.

(d) To be eligible for the credit under this section the taxpayer shall do all of the following:

(1) Retain for the taxpayer's records a copy of the information provided to the taxpayer pursuant to subdivision (c)(3).

(2) Provide a copy of the information provided to the taxpayer pursuant to subdivision (c)(3) to the Franchise Tax Board upon request. If the taxpayer fails to comply with the requirements of this subdivision, no credit shall be allowed to that taxpayer under this section for any taxable year unless the taxpayer subsequently complies.

(3) Provide the record owner of the tax credit bonds with the taxpayer's taxpayer identification number.

Section 63049.75. Tax credit bonds issued under this article are not a debt or liability of the state or of any political subdivision thereof (except the bank as provided herein), but shall be payable solely as provided in Section 63049.72. The state hereby pledges to and agrees with the holders and beneficial owners of tax credit bonds that the state will not limit, alter, or restrict the tax credits provided for in this article or in any way impair the rights or remedies of the holders and beneficial owners of tax credit bonds. The state covenants and agrees with the beneficial owners of tax credit bonds that tax credits provided for in this article shall at all times be free from state personal income tax and corporate income tax.

Section 63049.76. Notwithstanding any other provision of law, Articles 3, 4, and 5 of Chapter 2 of Division 1 of Title 6.7 of the Government Code do not apply to any financing provided by the bank pursuant to this Article 9, and the principal amount of interest bearing bonds and tax credit bonds issued pursuant to this Article 9 and Chapter 5 of Division 1 of Title 6.7 of the Government Code shall not count against the limit stated in the first sentence of Section 63071(b).

Amendment to Revenue and Taxation Code
Add Section 17053.25 to Chapter 2 of Part 10 of Division 2 of the Revenue and Taxation Code to read as follows.

Section 17053.25. There shall be allowed as a credit against the amount of net tax (as defined in Section 17039) the credit provided for in Government Code Sections 63049.73 and 63049.74.

Amendment to Revenue and Taxation Code
Add Section 23629 to Chapter 3.5 of Part 11 of Division 2 of the Revenue and Taxation Code to read as follows.

Section 23629. There shall be allowed as a credit against the "tax" (as defined by Section 23036) the credit provided for in Government Code Sections 63049.73 and 63049.74.

Appendix E
Media Survey and Initial Outreach

The goal of the media survey was to learn how much the media knows about goods movement and its component parts and to discover where the media turns for goods movement information. This appendix contains the full media survey questionnaire, a list of survey participants, and a summary table of results.

A. Media Survey Questionnaire

The following questions were asked of the media survey participants. The list of media participants and their responses are assembled in such a way as to disconnect the participants and his or her response.

1. Do you know the significance of goods movement and port-related trade in the Southland and what do you consider key in transportation issues?

2. Do you have a regular beat reporter on transportation or goods movement or port-related trade?

3. Who do you call when you want to obtain information on passenger trains in the Southern California region?

4. As an editor/writer or working member of the press which outlets or agency, website or office provides the best resource on goods movements?

5. In your opinion how could transportation agencies improve communication goods movement and port related trade to the public and media?

6. Would editorial or media tours improve your understanding of goods movements?

7. Would your media outlet participate in an event to educate your newsroom on impacts of goods movement growth from the ports and/or a tour of vital goods movement facilities via a train ride?

8. How could goods movement information be better disseminated?

B. Survey Participants

The table below shows the title and media outlet of the survey participants.

	Media Outlet	**Title**
1	Los Angeles Times	Transportation Reporter (5)
2	La Opinion	Gen Assign./Transportation Reporter (2)
3	Pasadena Star News	Gen. Assignment Reporter
4	LA Newspaper Group	Business/Transportation
5	Redland Daily Facts	Transportation Writer
6	Antelope Valley Press	Editor
7	San Gabriel Valley Tribune	Transportation Reporter (2)
8	LA Business Journal	Transportation Reporter
9	Inland Daily Bulletin	Metro Editor/Transportation
10	Press Enterprise	Editor (2)
11	Journal of Commerce	West Coast Editor
12	San Bernardino Sun	Editor
13	Orange County Register	Reporter (3)
14	Ventura County Star	Transportation Writer
15	OC Business Journal	Editor (2)
16	SFV Business Journal	Editor (2)
17	KTTV-11	Assignment Manager
18	KCOP-UPN TV 13	Assignment Editor
19	KABC-TV	Planning Editor
20	KCBS-TV 2	Planning Editor
21	KCAL 9-TV	Producer
22	KNBC-TV Ch. 4	Planning Editor
23	KNBC-TV Ch. 4	Assignment Editor (3)
24	KTLA-TV CH. 5	Planning Editor (3)
25	KVEA-TV 52	Producer (2)
26	KOCE-TV 50	Producer
27	KMEX-TV	Senior Assignment Editor
28	KFWB News 980 AM	Assistant
29	KNX 1070 AM	News Producer
30	KFI	News Director (2)
31	KPCC Public Radio	Transportation/Business Reporter

C. Survey Results

Consolidated Media Survey Summary Results

		Yes	No	None	Metrolink	LAEDC	MTA	Amtrak	OCTA	SCAG	Caltrans	SANBAG	ILWU	ACTA
1	Do you know the significance of goods movement and port related trade in the Southland and the key transportation issues?	37												
2	Do you have a regular beat reporter on transportation or goods movement or port related trade?	22	15											
3	Who do you call for information and which outlets or agency, websites or offices provide you resources on goods movements and passenger trains?			30	18	16	13	7	5	4	3	2	2	1
				More Timely Proactive	E-mail Web	Accurate Contact Info	Return Reporter Calls	Fax	Clear Concise	Call In Update	Speak Spanish			
4	In your opinion how could transportation agencies improve communication on goods movement and port related trade to the public and media and how could goods movement information be better disseminated?			37	20	19	18	14	8	8	2			
5	Would an editorial or media tours improve your understanding of goods movements?	31	6											
6	Would your media outlet participate in an event to educate your newsroom on impacts of goods movement growth from the ports and/or a tour of vital goods movement facilities via a train ride?	30	7											

Appendix F
Diversion

Watching the ships waiting in line for a chance to unload at the massive twin ports of San Pedro Bay, it is easy to understand the appeal of diversion. Sending the ships to other, presumably less crowded ports, would avoid the congestion at the Port of Los Angeles and the Port of Long Beach (POLA/LB). Whether diversion makes sense, however, depends on two key factors: demand in the local market and capacity at alternative ports. We present several measures for each of these variables as a rough indicator of why large-scale diversion (away from Southern California ports) is unlikely in the short term (5 years) but possible, with significant investment by retailers, manufacturers, and wholesalers, over the long term (10-20 years).

First, much of the cargo makes its first stop in Southern California. At least 35% is consumed here, and an additional 15% makes its first stop in the region as part of some broad value-added process. With so much of the cargo destined for businesses and consumers in Southern California, it makes economic sense to channel the lion's share of trade through POLA/LB. (Seattle, for example, is a day's sailing closer to Asia, but has only a small fraction of Southern California's market).

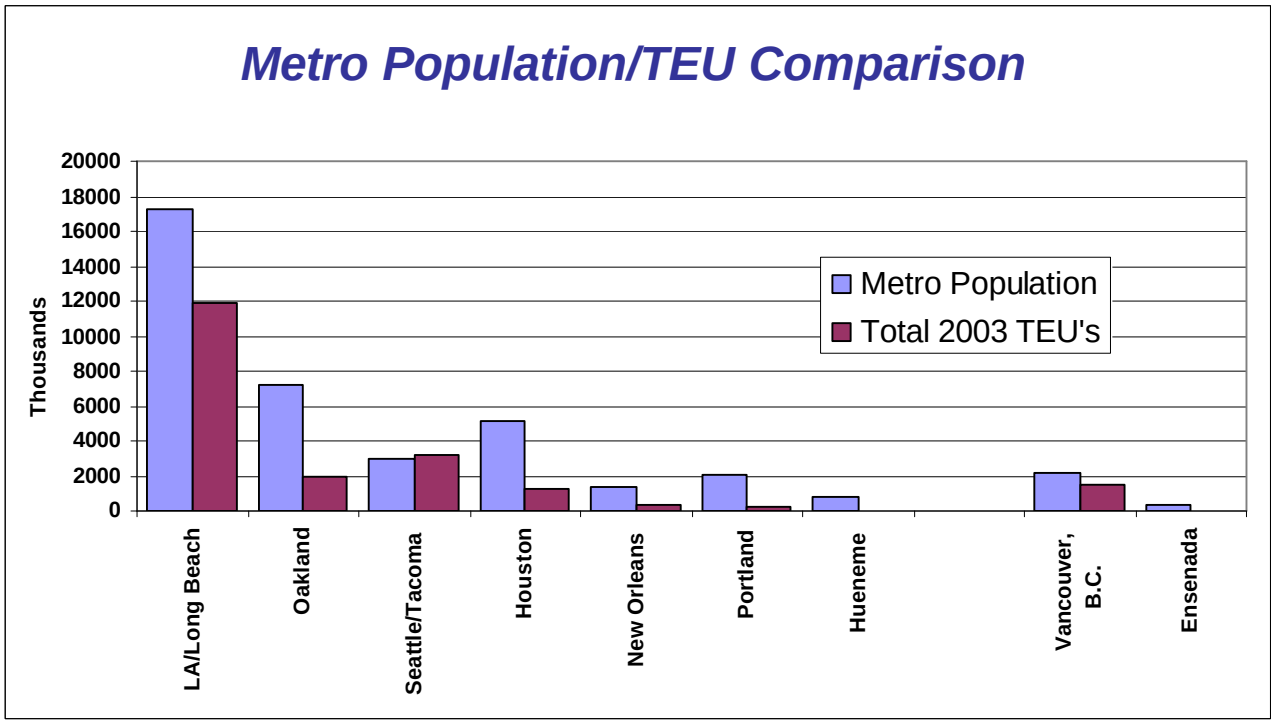
Secondly, POLA/LB handles more than two-thirds of all West Coast container traffic. The other West Coast ports are simply not big enough to handle more than a fraction of POLA/LB current container traffic, never mind acting as an alternative destination for future growth. The port of Oakland, for example is the next largest port on the West Coast. In 2003, however, the growth alone at POLA/LB was more than 80% of Oakland's total annual throughput. With container traffic growing rapidly everywhere on the West Coast, there is little excess capacity available to accommodate large-scale diversion from POLA/LB. Indeed, *all* of the ports will have to increase capacity to handle expected growth *even after allowing for an expected tripling in container traffic at POLA/LB.* A further constraint on possible diversion is created by the landside congestion and freeway and rail capacity constraints which other West Coast ports have in common with LA/LB.

I. Population and Consumer Market

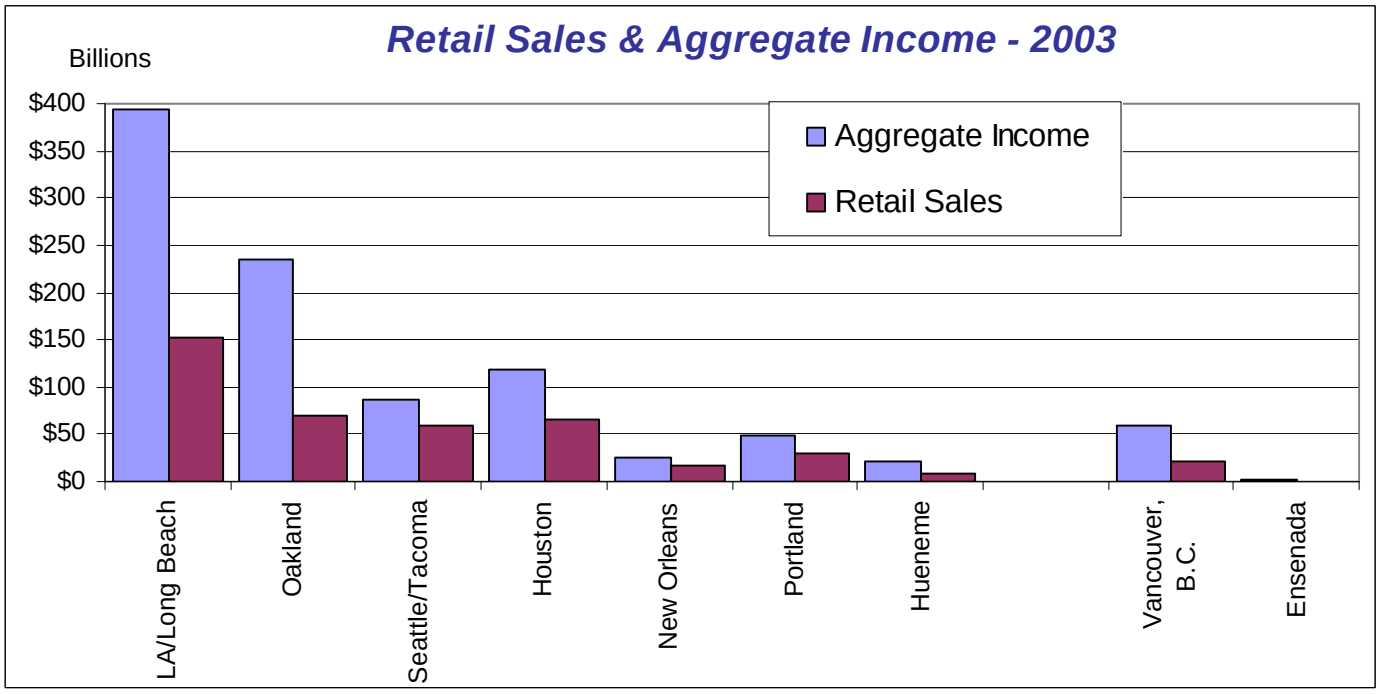
Trade growth will stretch the limits of local capacity because demand and capacity are inexorably drawing trade to Southern California. The demand is created by the level of disposable income and resulting purchasing patterns of the people who live here. Los Angeles, Orange, Riverside, San Bernardino, and Ventura Counties are home to 17 million people, more than the entire state of Florida, the nation's fourth most populous state. With San Diego County included, the regional population exceeds 20 million people, larger even than New York, the nation's third most populous state. This vast, comparatively affluent, and rapidly growing market makes the diversion of trade an unworkable long-term solution for most shippers. Certainly some cargo can be routed elsewhere, but the flood of goods ultimately destined for the Southern California market will be shipped here one way or another. Diverting ships to Seattle, for example, would just shift some of the additional truck traffic (and the attendant congestion and pollution) from the I-710 to the entire length of the I-5.

INDICATORS OF DEMAND							
Ports	**Current TEU–2003 (Millions)**	**Metro Population (Millions)**	**Aggregate Income ($Billions)**	**Retail Sales ($Billions)**	**Number of Businesses (000)**	**Number of Manufacturers (000)**	**Number of Wholesalers (000)**
LA/LB	11.9	17.3	394.4	151.4	389.2	27.1	34.4
Seattle/Tacoma	3.2	3.0	86.2	58.4	101.5	4.5	6.4
Oakland	1.9	7.2	234.3	67.7	195.6	10.0	12.0
Vancouver, BC	1.5	2.1	58.4	20.2	178.3	7.8	12.5
Houston	1.2	5.2	117.5	66.0	112.4	5.4	8.7
Portland	0.4	2.0	49.3	28.8	57.5	3.2	4.0
New Orleans	0.3	1.3	25.9	17.9	31.6	0.9	2.0
Ensenada	0.05	0.4	3.0	0.5	5.7	0.7	0.3
Hueneme	0.003	0.8	21.5	7.7	17.9	1.0	1.1

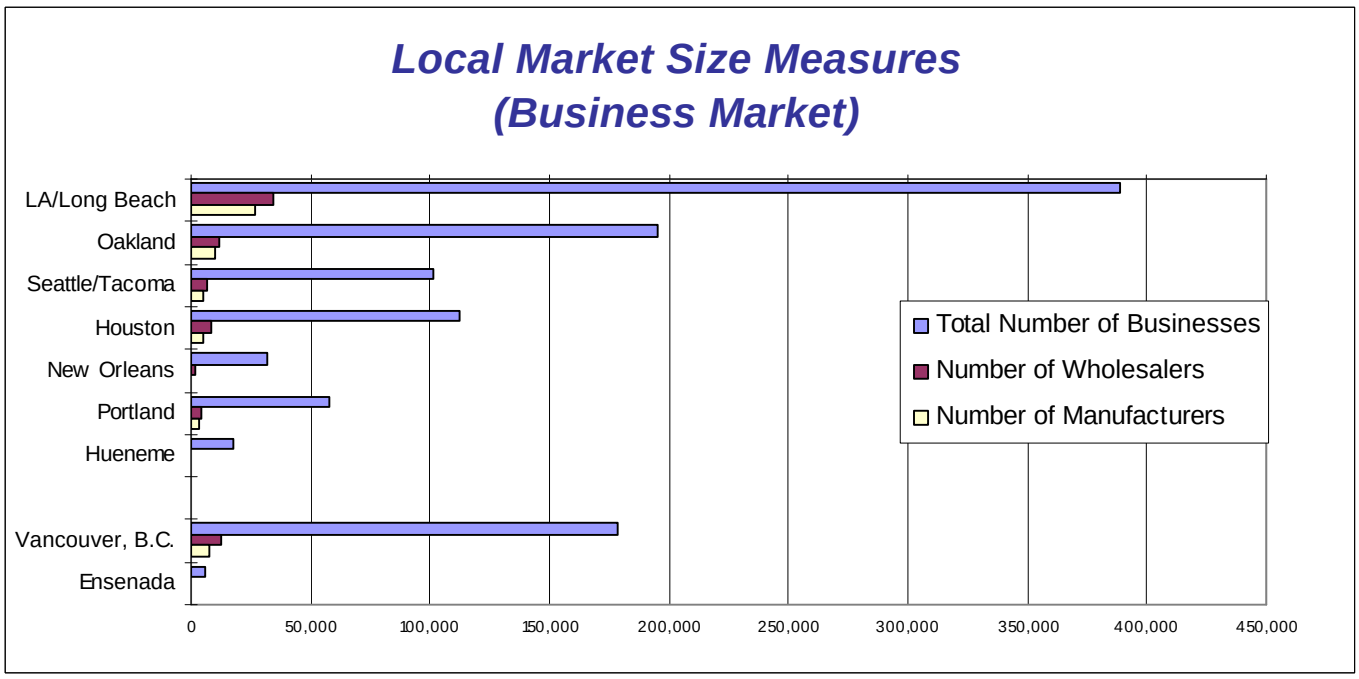
LA/LB leads in all major categories. NOTE: The number of businesses in Vancouver is large relative to the size of its metro population due to the high number of zero employee firms.



POLA/LB handled more than three times the amount of cargo containers than its closest competitor and has the largest consumer market on the West Coast. [Note: Hueneme is less than 150 acres in size, and most of its throughput is considered break bulk (non-containerized) and thus is not included in the TEU count.]



Although the LA/LB metro population has the largest aggregate income, consumers in New Orleans and Seattle/Tacoma spend a greater percentage of the region's income at retail outlets, 69% and 68%, respectively.



LA/LB has 2.5 times more manufacturers in its metro area than Oakland and over five times as many as any other major competitor. The number of manufacturers greatly affects trade volume by providing an economically advantaged entrance point for component products that need to be assembled before being distributed. Furthermore, the presence of many wholesalers encourages distributors to capture the potential market and grow their business in the region. Note that the LA regional economy is dominated by small and mid-sized firms. These firms account for much of the container traffic at LA/Long Beach and are not interested in moving their containers through other ports.

II. Port Capacity and Trade Infrastructure

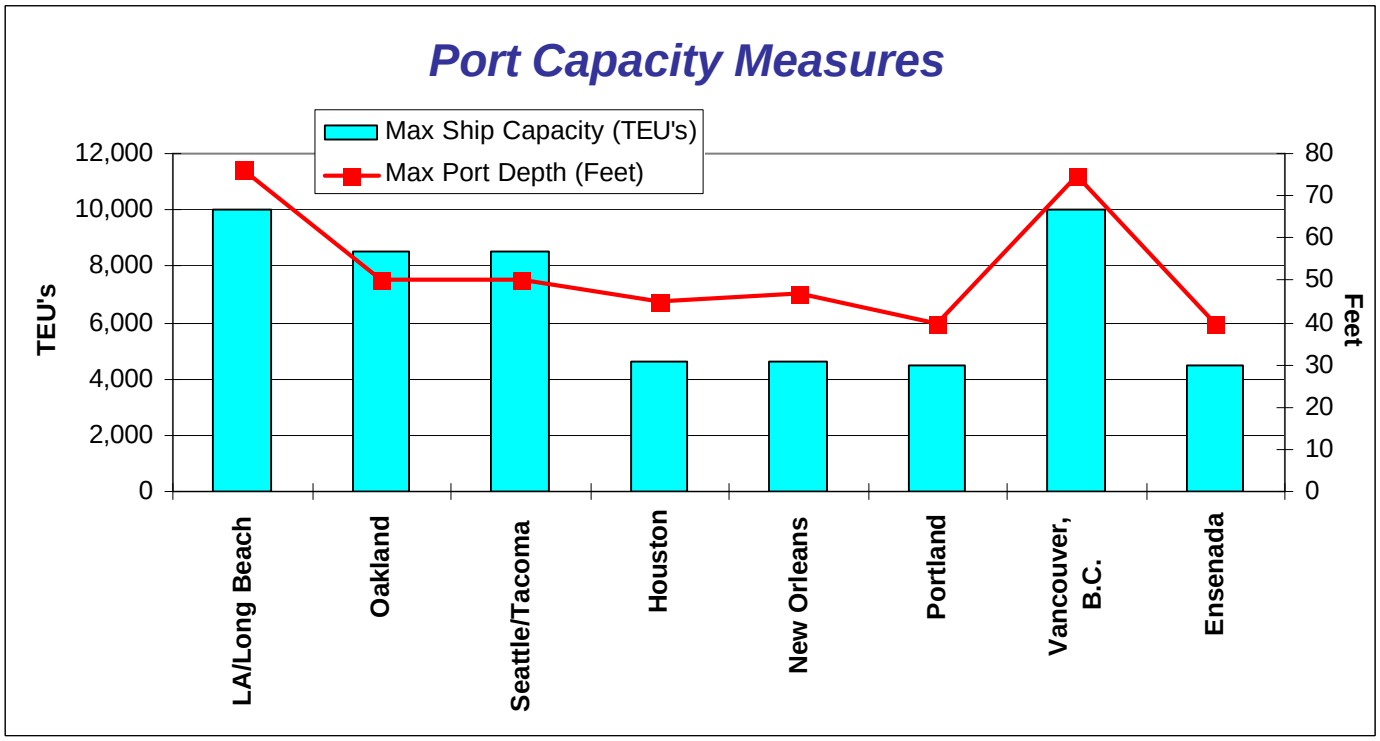
Southern California's trade infrastructure sustains hundreds of thousands of direct trade jobs. This group includes workers from all or part of numerous industries: rail transportation, water transportation, truck transportation, transportation support activities (such as freight forwarding and logistics), warehousing and storage, and wholesale trade. In 2003, there were approximately 250,000 direct workers in these industries in Los Angeles, Orange, Riverside, San Bernardino and Ventura Counties. The direct trade workers sustain additional indirect workers when they spend their salaries. Region-wide, the spending of direct trade workers sustains a further 300,000 indirect jobs, for a total of roughly 550,000 jobs dependent on the region's port, rail, intermodal, and highway trade infrastructure.

At best, the region's current ports, freeways, railroads, and intermodal rail yards could only be stretched to allow current trade volumes to double. Building the transportation infrastructure to accommodate expected growth in international trade, therefore, represents a key opportunity. If trade-related employment triples rather than doubles, the region will have created employment equivalent to the entire current trade-dependent workforce.

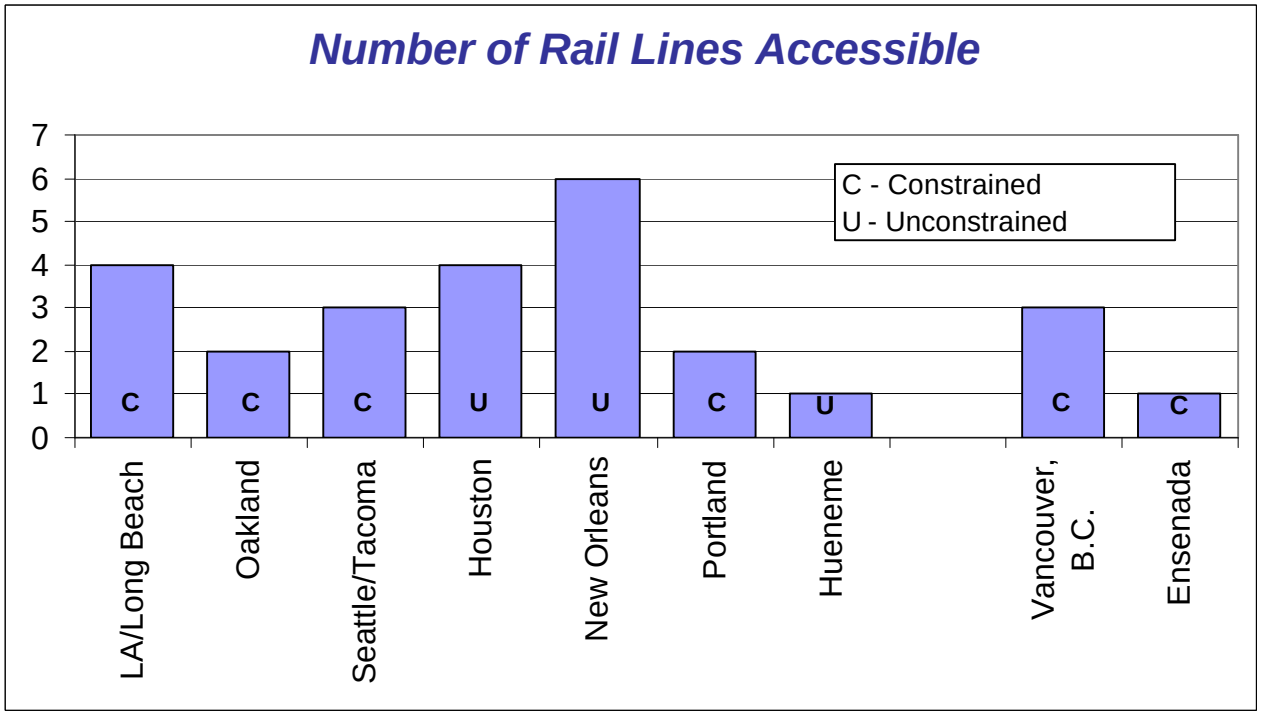
INFRASTRUCTURE CAPACITY SUMMARY

Ports	Total Terminals	Port Depth	Rail Lines	Rail Constraints	Freeway Access	Avg. Annual Vehicle Delay*	Industrial Space**	Industrial Vacancy
LA/LB	56	35'-76'	4	Yes	Yes	93	955***	2.9%
Vancouver, B.C.	25	37'-75'	3	Yes	Yes	N/A	N/A	2.4%
New Orleans	20	35'-47'	6	No	Yes	17	N/A	9.6%
Oakland	12	42'-50'	2	Yes	Yes	73	123	7.6%
Houston	10	40'-45'	4	No	Yes	58	365	8.2%
Seattle/Tacoma	6	36'-50'	3	Yes	Yes	46	147	8.8%
Portland	4	40'	2	Yes	Yes	41	127	9.9%
Ensenada	4	33'-40'	1	Yes	No	N/A	N/A	N/A
Hueneme	2	35'	1	No	No	31	N/A	6.0%

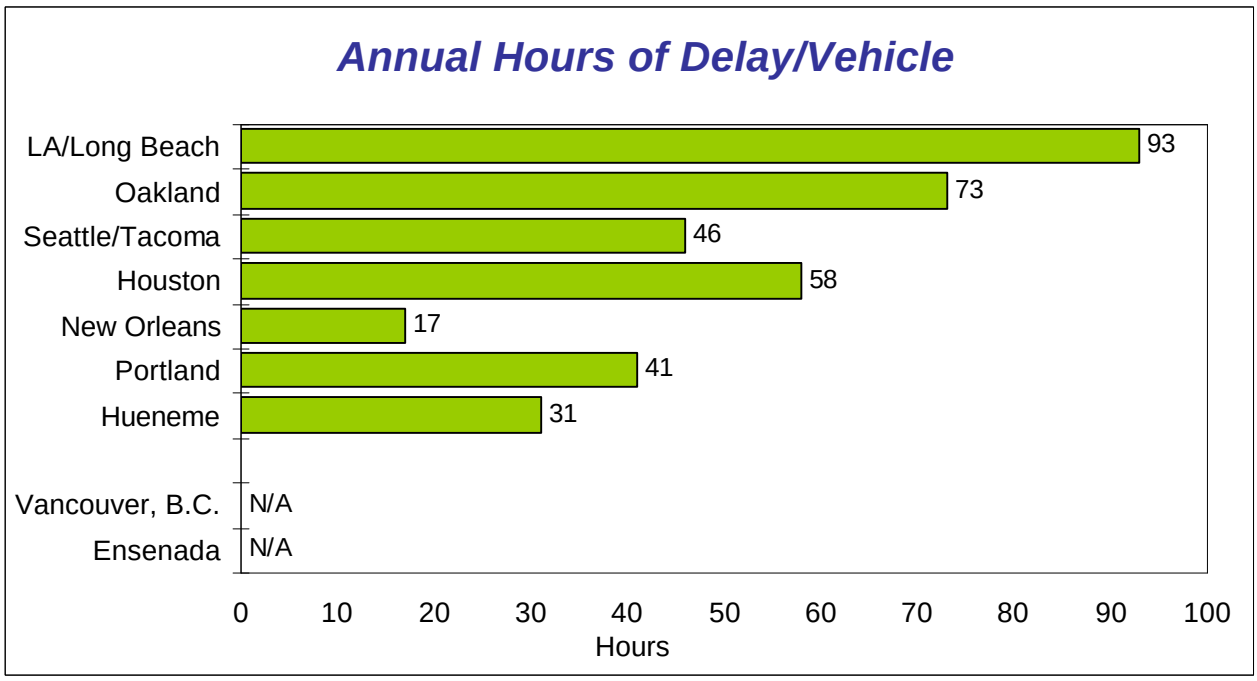
*Hours.
**Millions of square feet.
***L.A. County only. The total for L.A. plus Orange, San Bernardino and Riverside Counties is 1.5 billion square feet.



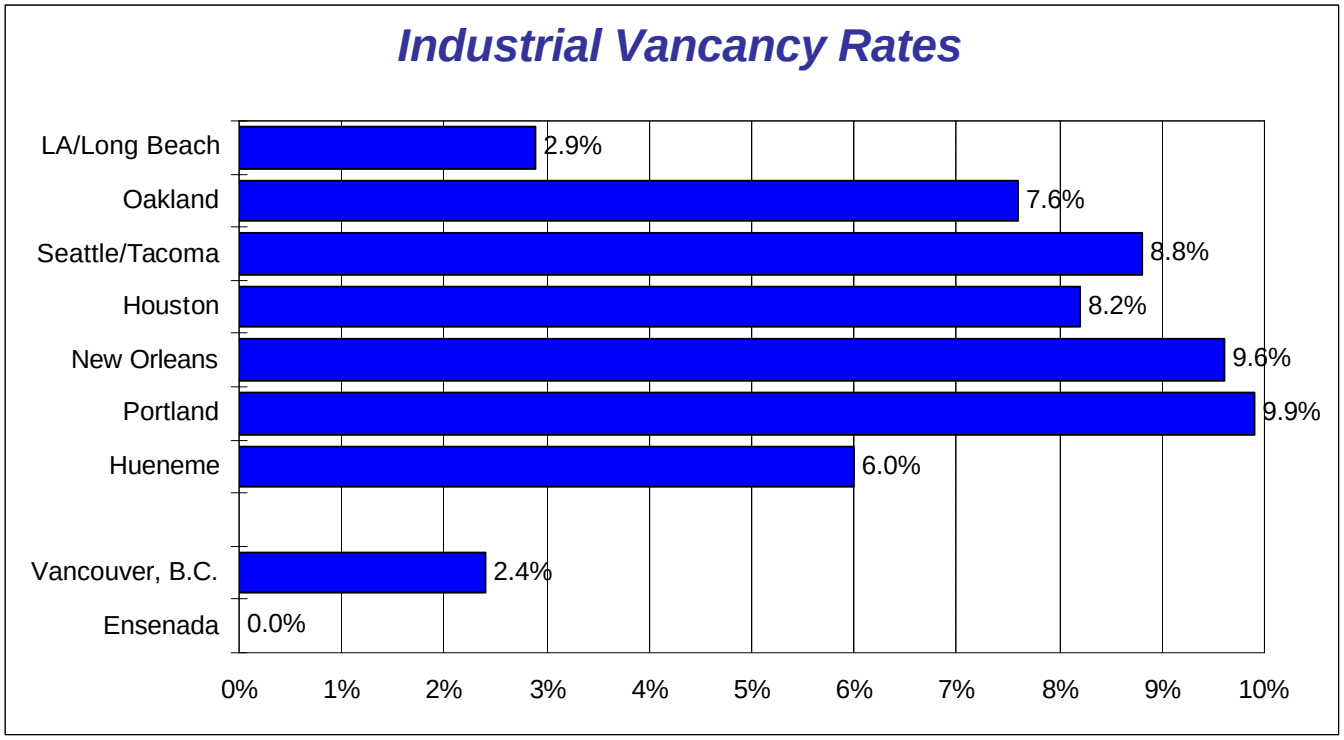
Only three ports can handle the "mega" ships that will go into service during 2005: LA/LB, Seattle and Vancouver, BC. Ports such as Houston and Portland have included dredging in their expansion plans in order to accommodate diverted ships. Additional cranes would be required to handle these vessels efficiently.



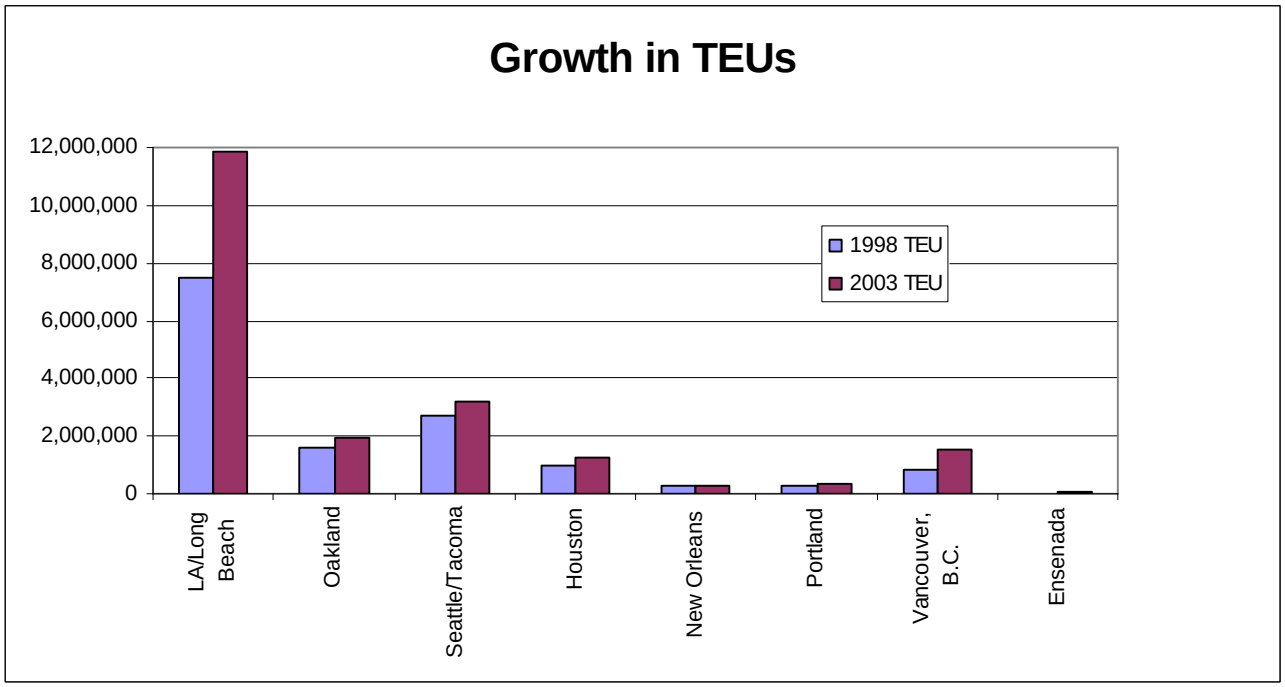
While the railroads have been adding to their workforce and buying equipment, many West Coast ports do not have any excess track capacity which is causing congestion to worsen. LA/LB is forever trying to meet future growth in demand; however, places such as Vancouver in 2003 found they were unable to handle even present demand at their current capacity.



According to the Texas Transportation Institute's annual survey of traffic congestion in major US cities, LA/LB consistently has the worst traffic in the nation. The other major ports, however, are hardly free from major traffic delay. Drivers in the Portland area, for example, lose on average an entire work week each year stuck in traffic.



Industrial vacancy in LA/LB is the lowest ever recorded in this region and the lowest in the US. Developable land and buildings for sale are in short supply. Industrial land is being converted to multi-family and retail uses further reducing potential available warehouse locations.



III. Conclusion

The local market in Southern California has greatly influenced trade in the region. Moreover, the scale of Southern California's infrastructure, which while clearly under strain, dwarfs the rest of the West Coast. Together, the Ports of Los Angeles and Long Beach are the third busiest container facility in the world, handling more than one third of all U.S. container traffic, and more than three quarters of all container traffic on the West Coast. In a mutually reinforcing relationship the volume of trade both supports and is supported by a network of logistic firms, freight forwarders, truckers, distribution centers, and other trade workers. Only Southern California has both the dockside and landside potential to accommodate the retail industry's shift to ever-larger container ships and the capability to meet the demand.

Appendix G
Statement to U.S. Senate
(September 9, 2002)

The Los Angeles County Economic Development Corporation (LAEDC) prepared the following document to educate the Senate on the region and national implications of waterborne trade and goods movement. It points to specific federal opportunities to enhance the efficient movement of goods and freight on the nation's transportation system. It was submitted to the hearings held by the Senate Subcommittee on Transportation, Infrastructure, and Nuclear Safety Environment & Public Works Committee and the Senate Subcommittee on Surface Transportation and Merchant Marine Commerce, Science and Transportation Committee in Washington, DC.

Introduction

Mr. Chairman and members of the subcommittees, the Los Angeles County Economic Development Corporation (LAEDC), a private nonprofit, 501(c) 3, is pleased to present this overview of goods movement in Southern California. We appreciate the opportunity to offer this statement as part of legislative hearing record being developed by the U.S. Senate in preparation for the reauthorization of TEA-21. We greatly appreciate the interest and focus of the respective full Committees in the issues surrounding TEA-21. In addition, we are very appreciative of the leadership demonstrated by Senator Barbara Boxer and Senator Diane Feinstein and the great economic and environmental benefits TEA-21 has brought to California's transportation system.

This statement is based from four public policy and transportation studies: the Southern California Freight Management Case Study (enclosed); the Alameda Corridor East Train Study (enclosed); the 60-Mile Circle (available at www.laedc.org the week of September 16th); and the forthcoming OnTrac Corridor Trade Impact Study, 2002. Together these studies, coordinated by the LAEDC, paint a remarkable picture of a region with a rapidly growing population, burgeoning international and domestic trade, and a looming trade transportation capacity crisis that has both local and national implications. Southern California is America's gateway to the Pacific Rim, and our nation's international trade is growing rapidly. Yet, Southern California's infrastructure is inadequate to handle this rising tide of trade, and the region will need federal assistance and creative solutions to finance the required improvements.

Today we would like to briefly introduce you to the region, describe its key population and trade trends, and summarize the region's infrastructure capacity shortfalls.

Regional Overview

Southern California, the five-county region comprised of Los Angeles, Orange, Riverside, San Bernardino and Ventura Counties, operates on a scale normally associated with states and even countries. At 17 million people and growing, more people live in Southern California than in all of Florida, currently the fourth most populous state in the

union. Despite its reputation for making movies and little else, Southern California employs more than a million people in manufacturing. Powered by core strengths in aircraft, biomedical technology, business services, food, furniture, metal fabrication, motion pictures and television production, textiles and apparel and tourism, the region produces over $600 billion in goods and services annually. This places the region's gross domestic product tenth in the world among countries, just behind Canada and Brazil and ahead of Mexico, Spain, India, South Korea and Australia. Home to almost 200 different nationalities and cultures, Southern California are one of the most diverse places on earth. The region is one of the top tourist destinations in the country, and thanks to its combination of wealth, size and reputation for trend setting, comprises one of the world's most important consumer markets.

Regional Trends and Resulting Capacity Shortages

Population and trade growth are the two key trends affecting the region. The five-county Southern California region will add more than 5 million people between 2000 and 2020. This is roughly equivalent to the combined populations of the Cities of Los Angeles and San Diego, or twice the population of Chicago. Much of the growth will be internally generated: In addition to having the largest population base among the 50 states, California also has one of the highest rates of natural increase (births minus deaths as a share of total population). Internal population growth will be supplemented by immigration. California has the highest rate of net international migration of any state, helping make Los Angeles a modern Ellis Island.

Two shocking implications of this growth: First, at current rates of automobile ownership, five million more people will add about 2.7 million private vehicles to the region's already congested freeways. Second, just to maintain the status quo, population growth of more than five million people will require adding twice the infrastructure and services that exist in present-day Chicago. For every school in Chicago, Southern California will need to build two.

In terms of trade, Southern California has emerged as a leading global trade and transshipment center because of its massive internal market, heavy investment in world-class trade infrastructure, and its new role as the distribution center for U.S.-Pacific Rim trade. The massive internal market draws trade both for final consumption and for inputs in valued-added products ranging from shirts that are labeled and placed on hangers to parts that are used in manufacturing. These two factors help to pull in still more trade, and drive up the percentage of international cargo that makes its first stop in Southern California. With so much cargo destined here in the first place, it makes sense for shippers to use the region as a distribution center for the rest of the United States. This role is confirmed by data from the Los Angeles Customs District, which recorded almost one-quarter trillion ($230 billion) dollars in trade for year 2000.The $230 billion in trade is an underestimate since it is merchandise trade only, therefore excluding some of the region's core strengths such as motion pictures, tourism, and financial services. The number is also low because it is based on port of entry only, thereby excluding the region's NAFTA trade with Canada and Mexico, which travels primarily by truck and rail

and thus is counted in border areas such as San Diego, Laredo and Detroit. Even still, the value of merchandise trade at the L.A. Customs District is expected to almost triple to $661 billion, 2000-2020. We'd like to quickly describe the growth trends and capacity issues for the region's ports, railroads, freeways and airports.

Ports - The Ports of Los Angeles and Long Beach are the busiest in the nation, together handling one-third of all container traffic in the United States and an astonishing 65 percent of all container traffic on the West Coast. With a combined container throughput of 9.5 million Twenty-Foot Equivalent Units (TEU) in 2000, they were the third busiest container facility in the world, behind only Singapore and Hong Kong.

The long-term trend in container traffic at the ports has seen steady growth, though the pace has slowed in recent months. As recently as 1998, the Alameda Corridor Transportation Authority (ACTA) conservatively forecast year 2000 container traffic of 5.6 million TEUs (twenty-foot equivalent units). The actual total was 9.5 million TEUs; no one, including the ports, anticipated that container traffic would grow so fast.

Container traffic on the Alameda Corridor East (see geographic map in Rail Corridors section) is now expected to almost double by 2010, and then double again to 32 million TEUs by 2025. For perspective, consider that a single large ship typically carries 6,000 TEUs. That is enough containers, placed end to end, to build a wall of boxes more than twenty miles long. The forecast growth may seem incredible, but if anything, it is probably conservative. Indeed, for the past ten years, traffic levels have consistently surpassed previous estimates.

Rail Corridors - Driven by the rising tide of trade flowing through the ports, easterly bound rail traffic is expected to rise dramatically over the next twenty-five years. The newly constructed Alameda Corridor - a 20-mile, high-speed, completely grade-separated train route connecting international trade via the ports and the rail yards just east of downtown Los Angeles - will handle some of the international increases. Yet the Alameda Corridor is only the first link of a massive regional mainline rail corridor network. Domestic and international trade at the two rail yards east of downtown is the starting points of the Alameda Corridor East. This eastbound corridor carries about three times the cargo of the recently completed Alameda Corridor because the intermodal rail yards receive more international goods by truck from the ports and even more domestic or locally produced goods for movement to the rest of the United States. The short answer is that Alameda Corridor East carries about 23% of the United States waterborne international trade and is the only corridor in Southern California that carries both domestic and international goods through the region to and from the rest of the United States.

Alameda Corridor East - (Union Pacific and Burlington Northern Santa Fe Mainlines)

Two rail corridors connect the downtown rail yards with the transcontinental rail network: the Alameda Corridor East (San Gabriel Valley Corridor), via the Union Pacific (UP) tracks through the San Gabriel Valley into San Bernardino and Riverside Counties,

and the Alameda Corridor East (OnTrac Corridor), which follows the Burlington Northern Santa Fe (BNSF) mainline through densely populated northern Orange County into Riverside and San Bernardino Counties. Freight and commuter trains also share the tracks of both corridors, further complicating efficient mobility. The OnTrac Corridor, going through the City of Placentia, carries 50% of all eastbound rail cargo and is the only rail artery used by the United Parcel Service to move cargo to Midwest and East Coast destinations. OnTrac Corridor train traffic will rise 210 percent, 2000-2025, while the San Gabriel Valley Corridors train traffic will increase 236 percent over the same period. Rail traffic on these routes, at more than one train every ten minutes, will easily surpass current capacity, barring major improvements, in the next 3-5 years. Intermodal lift capacity in the region - the facilities that transfer containers between trucks and trains is greatly constrained. Demand for intermodal lifts is expected to exceed capacity within the next 5 years. Simply put, in just a few years, a shortage of intermodal capacity and additional passenger trains will mean more trucks on the already congested freeways. At the same time, additional freight trains will translate into more cars on the freeway. Without additional capacity it is a no-win situation for local commuters, the other forty-nine states, and the U.S. Treasury. Local commuters will be impacted because they will reach unbearable congestion. The other forty-nine will see job growth slow because Southern California consumers will see more difficulty receiving goods through eastbound rail corridors, and the U.S. Treasury because the customs revenues collected on imported international goods - an unbelievable one percent of all U.S. Treasury revenues comes from customs duties - will likely slow or decrease due to inefficient freight mobility in Southern California. Currently about half of those customs revenues are collected on goods going through Southern California's transportation systems.

Freeway System - On the freeways, the number of vehicle miles traveled in Southern California has been rising faster than population growth. Rush hour has become an oxymoron in Los Angeles. The peak travel period has crept up to six hours per day, during which the average travel speed drops to 35 miles per hour. The Texas Transportation Institute annually surveys road congestion in metropolitan areas across the U.S., and Los Angeles has had the worst congestion every year since 1982.Ê The latest survey reveals 85% of all lane miles are congested, with almost half classified as extremely congested. As a result, on a per capita basis, the region wastes more hours (56) annually stuck in traffic than anywhere else in the country.

Some freeways handle up to 40,000 trucks daily, and with heavy truck traffic expected to rise 65 percent, 1995-2020, they may soon handle up to 80,000 truck trips daily. Owing to their size and operating characteristics, trucks use a much greater share of freeway capacity than their numbers might suggest. Already, heavy trucks use 45 to 60 percent of capacity on certain freeways, most notably the I-710. Since trucks move 81 percent of all tonnage originating in Southern California (according to the 1997 Commodity Flow Survey), increasing freight flows will mean more trucks on the freeways.

Airports - Southern California's economy is increasingly dependent on airports. Many of the region's leading industries - from tourism to manufacturing to biotechnology - depend on air travel and air cargo. Even businesses that don't rely on air cargo directly benefit

from the enhanced business connections and opportunities made possible by direct flights to and from our key overseas trading partners. The region's exports increasingly travel by plane. In 1995, 54 percent of regionally produced exports (by value) were shipped by air, and the percentage is higher today. Indeed, LAX handles more exports by dollar value each year than the Ports of Los Angeles and Long Beach combined.

LAX is already extremely busy. In 2000, LAX was the third busiest passenger airport in the world, after Atlanta (ATL) and Chicago (ORD). Similarly, LAX was the third busiest cargo airport in the world behind only FedEx-hub Memphis (MEM) and Hong Kong (HKG). Although air demand dipped following the September 11, 2001 tragedy, the impact on long-term air travel trends is expected to be slight. Air traffic demand has been skyrocketing, outpacing population growth. Estimates from the Southern California Association of Governments (SCAG) suggest air passenger demand will almost double from 82 million annual passengers (MAP) in 1998 to 157 MAP in 2020. Air cargo volume is expected to triple from 2.8 million annual tons in 1999 to 8.9 million tons in 2020. Preliminary, post-9/11 revisions suggest these levels will be reached two to three years later than previously estimated, with passenger growth delayed more than cargo. Overall, the region faces a capacity crisis; particularly now that it seems certain that an airport will not be built at El Toro in Orange County.

Congestion is a problem across all modes of transportation. The region will struggle to accommodate future freight operations; 10-15 year lead times for financing and constructing upgrades to infrastructure are almost guaranteed; current intermodal facilities at local ports and rail yards will reach capacity within 5 years; and without major investments, the rail lines east of downtown Los Angeles will be so congested the rail network will effectively cease to function. These problems will be exacerbated by congestion on the roads. Air cargo facilities, for example, rely on trucks to feed shipments to the airport and deliver airfreight to its final destination, yet traffic is terribly congested in the vicinity of LAX. Congestion threatens both domestic and international trade moving through the region, and the quality of life for people who live there.

National Implications

Southern California's trade transportation infrastructure should be of great concern to the rest of the United States because the region's global gateways and trade corridors act as conduits for two-way domestic and international surface trade between Pacific Rim nations and every region of the United States. Let's take a quick look at the OnTrac Corridor Trade Impact Study (2002) for two-way domestic and international surface trade during the year 2000 between California and regions of the United States.

The international trade figure for each region represents the two-way trade between other regions of the United States and overseas customers and suppliers that travel via the UP and BNSF train routes that comprise the Alameda Corridor East. The domestic trade numbers represent commerce between California and other states. Roughly half of the domestic trade between California and other states will originate or be consumed in Southern California (based on Southern California's share of the state's GDP).

International trade diversion to other ports of entry is cost prohibitive since half of all international goods would still need to be delivered to Southern California. This means that over 20% of all U.S. waterborne trade is consumed locally in Southern California, or 45% of all customs revenue that is generated in the United States goes through Southern California, or .5% of all the revenues of the United States Treasury is collected via customs duties on products imported through Southern California each year.

The Northwest states (WA, OR, MT, ID and WY) received and sent international trade via the Alameda Corridor East in 2000 valued at $2.2 billion dollars. Domestic trade between the Northwest and California for the same year was $60.4 billion. For the Great Plains states (ND, SD, NE, KS, MN, IA and MO), the comparable figures were $8.6 billion and $42.4 billion. The numbers for the Great Lakes states (IL, WI, MI, IN, KY, OH and WV) were $25.0 billion and $69.4 billion. For the Atlantic Seaboard (CT, DE, ME, MD, MA, NH, NJ, NY, PA, RI, VT and VA), the figures were $34.4 billion in international and $74.6 billion in domestic trade. In the Southeast (AR, AL, GA, FL, LA, NC, SC, TN and MS), the numbers were $16.0 billion international and $71.7 billion domestic. For Texas and Oklahoma, the numbers were $12.1 billion international and $54.2 billion domestic. And finally, for the Southwest states (CA, NV, AZ, UT, CO and NM), international trade moving through the Alameda Corridor East rail routes was valued at $98.0 billion and domestic trade with California was worth $80.3 billion. The Southwest was the only region where the international trade was larger than the domestic only because California's international trade is included, but California's domestic trade with itself (worth $1.3 trillion in 2000) is not included in the $80 billion regional total.

All these billions of dollars in domestic and international trade represent the value in two-way trade to other regions of the country and highlight the importance of efficient movement of goods through Southern California for the entire country. The domestic surface trade between California and the other states, worth tens of billions of dollars annually, dwarfs the enormous international trade flows. California consumers represent one of the largest markets for goods produced by other U.S. states. Thus, investing national funds in efficient transportation networks in California is actually in other states' interest. For example, Montana sells Californians about $1.5 billion of domestic products each year and receives about $10 million of international trade through Southern California ports and corridors. Iowa, on the other hand, sells Californians about $5 billion worth of products each year and only buys about $300 million of Californian products in return. So, a lot of jobs depend on Southern California's appetite for products and all the Federal money spent on trade transportation infrastructure in Southern California will ensure that the goods produced in other states continue to reach their California customers in a timely way; may reduce warehousing cost through logistics strategies like "just-in-time" delivery; and will speed goods to and from overseas to destinations throughout the United States.

Reauthorization of TEA-21 and Freight Policy

During the deliberations by your respective subcommittees regarding the reauthorization of TEA-21, we urge that you give strong consideration to the following proposals for

federal action to enhance the efficient movement of goods and freight on the nation's transportation system:

1. Freight movement should be considered a major policy focus and high priority in the TEA-3 legislation;

2. A dedicated category of federal funding should be established to support freight related transportation infrastructure. Particular support should be given to trade corridor improvements, similar to the Alameda Corridor East extension program in Southern California, and other similar global gateways throughout the country. In addition, support should be given to the implementation of intermodal connectors, including connectors designed to improve ground access at international airports;

3. Increased funding flexibility should be extended to existing TEA-21 funding categories, including CMAQ, providing access to freight related infrastructure, including rail grade-crossing and lowering improvements;

4. Consideration should be given to new and innovative funding sources, including direct user-based fees, similar to the financing arrangement used for the Alameda Corridor project. Another concept we urge you to review is the earmarking of the incremental growth in custom revenues going through the nation's corridors and global gateways. These added funds should be targeted to support unfunded infrastructure improvements in communities that are directly related to the growth of two-way domestic and international trade;

5. New policies and provisions, including changes in federal tax policy to encourage public private transportation partnerships, including an enhanced role for Class I railroads serving the nation's most severely congested corridors; and

6. Establish an Office of Freight Policy and Implementation in the Office of the Secretary of Transportation. One option would be to expand the current responsibilities of the Office of Intermodalism, and place the management responsibility with the Under Secretary of Transportation.

Mr. Chairman, thank you for the opportunity to submit this statement for the legislative record associated with the reauthorization of TEA-21.